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ABSTRACT

This self-paced, individualized course, adapted from military curriculum materials for use in vocational and technical education, teaches students about nutrition, food preparation, and food service. This student workbook, one of three parts of the course, contains basic information on menu planning and nutrition; food standards and costs; custom foods, specialty meals, and buffets; yeast-raised products and sweet doughs; food storage; and supervision of work assignments and the kitchen and dining room. The text contains eight reading assignments. Each reading assignment consists of three parts: the reading assignment and objectives to be mastered, the reading material, and the self-quiz with accompanying answers and text references. A bibliography completes the workbook. (KC)

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SUBSISTENCE SPECIALIST SECOND CLASS, 9-12

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MILITARY CURRICULUM MATERIALS

The military-developed curriculum materials in this course package were selected by the National Center for Research in Vocational Education Military Curriculum Project for dissemination to the six regional Curriculum Coordination Centers and other instructional materials agencies. The purpose of disseminating these courses was to make curriculum materials developed by the military more accessible to vocational educators in the civilian setting.

The course materials were acquired, evaluated by project staff and practitioners in the field, and prepared for dissemination. Materials which were specific to the military were deleted, copyrighted materials were either omitted or approval for their use was obtained. These course packages contain curriculum resource materials which can be adapted to support vocational instruction and curriculum development.

SUBSISTANCE SPECIALIST SECOND CLASS 9-12

TABLE OF CONTENTS

Course Description	Page 1
Menu Planning/Nutrition	Page 9
Standards/Menu Costing	Page 48
Custom Food, Speciality Meals, and Buffets	Page 66
Yeast-Raised Products/Sweet Doughs	Page 87
Food Storage	Page 102
Supervision - Work Assignments	Page 115
Supervision - Galley Watch	Page 130

SUBSISTANCE SPECIALIST SECOND CLASS SS2-0251

Correspondence Course 9-12

Developed by:

United States Coast Guard

Occupational Area:

Food Service

Development and Review Dates:

February 1982

Print Pages:

151

Availability: The National Center for Research in Vocational Education; ERIC

Suggested Background:

NONE

Target Audiences:

Grade 11 - Adult

Organization of Materials:

Student workbook with objectives, assignments, tests and answers.

Type of Instruction:

Individualized, self-paced

Type of Materials:	No. of Pages:	Average Completion Time:
Student Workbook	152	Flexible

Supplementary Materials Required:

NONE

THE NATIONAL CENTER FOR RESEARCH IN VOCATIONAL EDUCATION
OSU The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210
(614) 486-3655

Course Description:

The purpose of this course is to provide the subsistence specialist with an opportunity to learn about nutrition and how it impacts on the overall menu planning procedures; advanced baking/food preparation procedures; basic supervisory/management techniques; and food inspection/food storage standards.

Each assignment in this text is divided into three basic parts. They are; the reading assignment and objectives to be mastered, the reading, and the self-quiz with accompanying answers and text references.

Text includes basic information on:

- Menu Planning/Nutrition
  Standards/Menu Costing
  Custom Foods, Specialty Meals, and Buffets
  Yeast-Raised Products/Sweet Doughs
  Food Storage
  Supervision - Work Assignments
  Supervision - Galley Watch.

SUBSISTANCE SPEC 2ND CLASS

3

COAST GUARD INSTITUTE

DINING FACILITY PROCEDURES

OKLAHOMA CITY

DEPARTMENT OF TRANSPORTATION
U. S. Coast Guard (02/82)

U. S. Coast Guard Institute
PAMPHLET NO. 596

7

4

DINING FACILITY PROCEDURES

Third Edition: September 1980
Reprinted: February 1982

U. S. Coast Guard Institute
Personnel Services Branch
P.O. Substation 18
Oklahoma City, OK 73169
FTS: 749-2333

Questions about this text should be addressed to the Subject Matter Specialist for the Subsistence Specialist Rating.

5

REFERENCES

COMMERCIAL PUBLICATIONS

Crawford, H.W. & M.C. McDowell. Math Workbook - Food Service/Lodging. Boston, Mass: Cahners Books International, Inc., 1971.

Forster, August. American Culinary Art. Boston, Mass: CBI Publishing Company, Inc., 1971.

Kotschevar, L.H., Ph.D. Standards, Principles, and Techniques in Quantity Food Production. Boston, Mass: Cahners Book International, Inc., 1966.

Waldner, George K. & Klaus Mitterhauser. Book of Buffets. New York: Ahrens Publishing Co., Inc., 1958.

GOVERNMENT PUBLICATIONS

Armed Forces Recipe Service (NAVSUP-7)

Food Service Operations (NAVSUP-421)

Food Service Sanitation Manual (COMDTINST M6240.4)

42-Day Armed Forces Menu (NAVSUP-516)

Mess Management Specialist 3 & 2 (NAVEDTRA 10267-A)

Subsistence Support Manual (COMDTINST M4061.3)

NOTICE TO STUDENT

The primary purpose of this self-paced, non-resident course is to provide the subsistence specialist with an opportunity to learn about nutrition and how it impacts on the overall menu planning procedures, advanced baking/food preparation procedures; basic supervisory/management techniques; and food inspection/food storage standards. It is specifically designed for the Third Class Subsistence Specialists as a required component for promotion eligibility to SS2. The course content is based on the Enlisted Qualifications Manual COMDTINST M1414.8 (old CG-311).

> IMPORTANT NOTE: This text has been compiled for TRAINING ONLY. It should NOT be used in lieu of official directives or publications. The text information is current according to the bibliographic references cited. You should, however, remember that it is YOUR responsibility to keep abreast of the latest professional information available for your rank and rating. Current information is available in the Coast Guard Enlisted Qualifications Manual COMDTINST M1414.8 (old CG-311).

This text is only one of the two which are required for this course. This particular text provides basic information on:

(1) Menu Planning/Nutrition
(2) Standards/Menu Costing
(3) Custom Foods, Specialty Meals, and Buffets
(4) Yeast-Raised Products/Sweet Doughs
(5) Food Inspection
(6) Food Storage
(7) Supervision - Work Assignments
(8) Supervision - Galley Watch

Each assignment in this text is divided into three basic parts:

(1) The reading assignment and objectives to be mastered.
(2) The reading material.
(3) The self-quiz with accompanying answers and text references. Answers are located on the page(s) immediately following the quizzes.

CONTENTS

TITLE	PAGE
References	ii
Notice To Student	iii
Reading Assignment #1 - Objectives	1-1
Menu Planning/Nutrition	1-3
Introduction	1-3
Why Plan?	1-3
The Menu Planner	1-3
The Menu Draft	1-3
Planning Guides and Restrictions	1-3
Errors in Menu Planing	1-5
Major Meal Components	1-16
Guidelines for Planning Breakfast Menus	1-17
Guidelines for Planning Noon and Evening Meals	1-20
Guidelines for Planning Short Order Meals	1-20
Guidelines for Planning Ethnic Meals	1-22
Guidelines for Planning Low-Calorie Meals	1-26
Nutrition	1-27
Check-Up Time	1-30
Submitting and Posting the Menu	1-30
Self-Quiz #1	1-33
Answers to Self-Quiz #1	1-37
Reading Assignment #2 - Objectives	2-1
Standards/Menu Costing	2-3
Introduction	2-3
Using Standards in Food Service	2-3
Costing Standard Recipes	2-4
Self-Quiz #2	2-13
Answers to Self-Quiz #2	2-17
Reading Assignment #3 - Objectives	3-1
Custom Foods	3-3
Specialty Meals	3-4
Buffets	3-6
Self-Quiz #3	3-19
Answers to Self-Quiz #3	3-21

8

CONTENTS (Continued)

Reading Assignment #4 - Objectives 4-1
Yeast-Raised Products 4-3
Introduction 4-3
Baking Ingredients 4-3
Production Procedures 4-6
Short-Time Method 4-10
Hot Roll Production 4-10
Bread and Roll Mix 4-10
Variety Bread Production 4-11

Self-Quiz #4 4-13
Answers to Self-Quiz #4 4-15

Reading Assignment #5 - Objecitves 5-1
Introduction 5-3
Inspection Standards 5-3

Self-Quiz #5 5-11
Answers to Self-Quiz #5 5-13

Reading Assignment #6 - Objectives 6-1
Introduction to Bulk Storage of Food Items 6-3
Special Considerations 6-3

Self-Quiz #6 6-15
Answers to Self-Quiz #6 6-16

Reading Assignment #7 - Objectives 7-1
Introduction - Supervision - Work Assignments 7-3
Strikers 7-4

Self-Quiz #7 7-7
Answers to Self-Quiz #7 7-9

Reading Assignment #8 - Objectives 8-1
Introduction - Supervision - Galley Watch 8-3
Food Presentation 8-3
Galley Hints 8-7

Self-Quiz #8 8-11
Answers to Self-Quiz #8 8-13

Appendix A - Bibliography A-1

12

READING ASSIGNMENT #1

Pages 1-3 through 1-31

"Menu Planning/Nutrition"

OBJECTIVES

After completing this assignment, you should be able to:

1. Explain why you must plan menus.
2. Explain why variety must be considered in menu planning.
3. Explain procedures for drafting menus.
4. Describe the two major systems for planning menus for CG use.
5. Cite two good guides to employ when planning menus for CG use.
6. State the purpose for using the Basic Four Food Groups when planning menus.
7. State minimum daily requirements from each of the Basic Four Food Groups.
8. State alternates which may be substituted for foods in each of the Basic Four Food Groups.
9. Explain methods for determining food preference.
10. Explain the necessity for good food acceptance; describe procedures for computing an acceptance factor.
11. Explain the necessity for keeping good meal attendance records.
12. Explain how maintaining food consumption records can aid in the menu planning process.
13. Cite the primary restriction which is placed on the menu planner.
14. Cite the six major components of a meal; describe each.
15. Cite the basic guidelines for planning breakfast menus.
16. Describe an "ala carte" breakfast menu.
17. Cite the basic guidelines for planning noon and evening meals.
18. Cite the basic guidelines for planning short order menus.
19. Explain why ethnic meals should be incorporated into menu planning.
20. Describe special considerations for planning low-calorie meals.
21. Cite eight common errors made in menu planning.
22. Cite the five basic nutrients; explain the necessity for each in the diet.

10

23. Cite eight vitamins which are essential for proper nutrition; cite good food sources for each.
24. State five minerals which are essential for proper nutrition.
25. Define "calories."
26. Explain why you should consider calories when planning menus.
27. Explain the importance of fluid in the diet.
28. Explain the importance of bulk in the diet.
29. Cite ten cooking rules you should follow in order to conserve the nutritional value of foods.
30. Describe the procedures for submitting and posting prepared menus.

MENU PLANNING/NUTRITION

INTRODUCTION

Planning well-balanced meals is a very important part of your job as a subsistence specialist. As you advance in rate, this becomes as much a part of your job as the actual food preparation. In order to plan meals properly, you must have a good working knowledge of nutrition. The best available guide for dividing foods according to the nutrient(s) supplied is the DAILY FOOD GUIDE. Another important aspect of the menu planning process is noting the types of foods which are preferred by your particular crew. This can be done effectively by listening to the crew's comments and by observing the serving lines and tray waste.

WHY PLAN?

Food is needed for several reasons:

- It provides energy
- It supports body growth (builds tissue)
- It aids in the repair of body tissue
- It helps regulate body functions

Each nutrient in a food performs a specific task in the body. Most nutrients work best in combination with other nutrients. Amounts of nutrients which are required vary from individual to individual. Proportionately greater amounts of all nutrients are needed for body growth than are needed simply for body upkeep. Normally, males require more food than females do; large people need more than small people; active people need more than inactive ones; sick people need more than healthy people.

Since no single food or food group contains all the required nutrients, a variety of food is necessary for adequate nutrition. There are countless combinations of foods which will provide all the essential nutrients. This is why planning is a necessary part of the total food preparation process.

THE MENU PLANNER

When you develop menus for use in the Coast Guard, two primary considerations are that your menus must not only provide the necessary nutrition, but they must also be flexible and adaptable. The CG menu planner has to work within the confines of cost, available equipment, and available personnel. Other considerations include the patron, the season, the occasion, the type of service, and the availability of foods. You, as a menu planner, must learn to manipulate each of these factors in order to produce the most suitable menus for your crew.

THE MENU DRAFT

A menu can be planned for one meal, a whole week, or for longer periods if necessary. There are many considerations which must be cranked into the menu plan itself. As a preliminary step in planning your menus, a Menu Draft (NAVSUP-1092) should be prepared. A sample of a portion of this draft is provided in Illustration 1-1. Note that certain standard menu items such as beverages and butter are pre-printed on the form.

MENU PLANNING SYSTEMS

The systems for planning menus involve more than just listing food items on a form. The Coast Guard enlisted dining facilities utilize two basic planning systems. They are (1) the standard system and (2) the rotation system (cycle).

STANDARD SYSTEM

A standard menu is designed for a specific time. This time is generally for a one-week period. Each menu begins with a completely new draft.

CYCLE SYSTEM

A cycle menu is a series of standard menus. They are designed to be used in a consecutive order and repeated over and over again. A sample three-week cycle menu is shown on pages 1-6 through 1-11. Be sure to read your NOTE at the bottom on page 1-7.

PLANNING GUIDES AND RESTRICTIONS

There are many guides which you should use when planning menus. As you implement these guides, however, you must always remember that there are also restrictions which must be considered in the planning process.

12

NAVSUP FORM 1092 (REV. 8-73)
S/N 0108-LF-009-7911

MENU DRAFT

	MONDAY	RECIPE	TUESDAY	RECIPE	WEDNESDAY	RECIPE	THUESDAY	RECIPE
	Selected fresh fruit		Selected fresh fruit		Selected fresh fruit		Selected fresh fruit	
	Assorted ready-to-eat cereal		Assorted ready-to-eat cereal		Assorted ready-to-eat cereal		Assorted ready-to-eat cereal	
	Chilled orange juice		Chilled grape juices		Chilled apple juices		Chilled tomato juice	
B	Fresh milk		Fresh milk		Fresh milk		Fresh milk	
R	Fried eggs to order	F-10	Fried eggs to order	F-10	Fried eggs to order	F-10	Fried eggs to order	
E	Soft scrambled eggs	F-13	Soft scrambled eggs	F-13	Individual omelets	F-11-5	Individual spanish omelets	F-11
A	Hard cooked eggs	F-6	Hard cooked eggs	F-6	Hard cooked eggs	F-6	Cottage fried potatoes	Q-46-2
K	Home fried potatoes	Q-47	Grilled smoked ham		Hash brown potatoes	Q-46	Grilled ham slices	L-65-1
F	Crisp bacon slices	L-3	Crisp bacon slices	L-3	Grilled sausage links	L-89-1	Grilled sausage patties	L-89-1
A	Grilled luncheon meat	L-78	Buttered waffles		Crisp bacon slices	L-3	Cinnamon french toast	D-22
S	Golden french toast	D-22	Hot maple syrup		Golden griddle cakes	D-25	Hot maple syrup	
T	Hot maple syrup				Hot buttered maple syrup			
	Butter — Jam — Jelly Fresh toast		Butter — Jam — Jelly Fresh toast		Butter — Jam — Jelly Fresh toast		Butter — Jam — Jelly Fresh toast	
	Glazed or cake doughnut	D-18-7	Oven fresh cinnamon rolls		Apple quick coffee cake	D-132	Swedish tea rings	DG7(4)11
	Coffee		Coffee		Coffee		Coffee	
	Tomato vegetable soup	F-7	Old fashioned bean soup	F-8-1	Manhattan clam chowder	F-12-1	Cream of mushroom soup	F-14
	Garlic croutons and crisp saltines		Baked tuna and noodle		Boiled New England dinner	L-43	Chicken chow mein	L-150-1
	Steamship round of beef	L-4-1	Grilled pork slices		Simmered corned beef		Cantonese style vegetables	QG-2
	Rare-medium-well done		Country cream gravy	O-17	Buttered potato halves	Q-77	Oven roast of beef	L-5
	Brown gravy		Snowflake potatoes	Q-57	Steamed cabbage wedges	QG-2	Brown pan gravy	O-16
L	Baked Idaho potatoes		Steamed white rice	E-5	Seasoned carrot pennies	QG-2	Snowflake potatoes	Q-57
U	w/sour cream	M-68	Seasoned brussel sprouts	Q-11	Spicy mustard sauce	O-6	Seasoned broccoli spears	QG-3
N	Steamed long grain rice	E-5	Buttered hominy	QG-1	Tangy horseradish	O-16	Buttered corn kernels	QG-3
C	Buttered asparagus	QG-1	Spiced apple sauce	LBS	Hot dinner rolls	D-33	Hot cluster rolls	DG6(1)14
H	Scalloped cream style corn	Q-23-1	Hot sesame seed rolls	D-33	Garden salads selection		Garden salads selection	
	Tangy horseradish		Garden salad selection		Boston cream pie	G-32-2	Florida orange cake w/	G-32-10
	Hot dinner rolls	D-33	Peanutbutter cookies	M-24			Butter cream frosting	G-32
	Assorted breads	BRD. DIS.	Assorted breads	BRD. DIS.	Assorted breads	BRD. DIS.	Assorted breads	BRD. DIS.
	Butter		Butter		Butter		Butter	
	Garden salads selection		Chilled pear halves					
	Fresh apple pie or blueberry pie	I-53 I-53-1						
	Coffee — Tea — Milk		Coffee — Tea — Milk		Coffee — Tea — Milk		Coffee — Tea — Milk	
	Breaded veal steaks	L-99	Chicken noodle soup	P-2-1	Hot chili con carne	L-28	Tomato rice soup	P-6-3
	Choice baked meat loaf	L-35	Newport style chicken	L-144	Crisp spicy tacos	M-21	Breaded fish squares	
	Rich onion gravy	O-17-1	Braised beef cubes	L-14	Mexicana enchiladas	L-106	Smothered swiss steak	L-16-1
	Franconia potatoes	Q-50	Giblet gravy	O-16-1	Smoked ham steaks	L-65-2	Brown onion gravy	O-17-1
D	Tossed green rice	E-5-(2	Golden french fried potatoes	Q-45	Refried beans with cheese	M-75	French fried potatoes	Q-45
I	Buttered baby limas	QG-3	Buttered corn on the cob	QG-3	Spanish rice	E-9	Seasoned cauliflower	QG-3
N	Normandie carrots	Q-171	Seasoned sweet peas	Q-43	Hot cloverleaf rolls	DG6(1)1	Fresh snap beans	QG-3
N	Hot brown and serve rolls	D-35	Hot parker house rolls	DG6(2)1	Garden salads selection		Hot cluster rolls	DG(1)14
E	Garden salads selection		Garden salads selection		Ice cream sundae	F-12	Garden salads selection	
R	Fluffy white cake w/	G-30	Glazed pineapple or cherry pie	I-42 I-53			Minature sugar cookies	M-27
	French cream frosting	G-46					Chocolate pudding w/	J-14
							Dessert topping	K-16
	Assorted Breads	BRD. DIS.	Assorted Breads	BRD. DIS.	Assorted Breads	BRD. DIS.	Assorted Breads	BRD. DIS.
	Butter		Butter		Butter		Butter	
	Coffee — Tea — Milk		Coffee — Tea — Milk		Coffee — Tea — Milk		Coffee — Tea — Milk	

Illustration 1-I: Menu Draft (NAVSUP-1092)

ERRORS IN MENU PLANNING

SOUP OF THE DAY	This is a common term on menus, but remember -- *if it is good enough to serve twice, it is good enough to make twice;* NO LEFTOVERS PLEASE!
ASSORTED	This is another common menu term. TRY SOMETHING DIFFERENT.
GASEOUS VEGETABLES AND SOUPS	Avoid serving both a gaseous vegetable and a gaseous soup during the same meal.
ETHNIC MEALS	A common mistake in menu planning is having both the lunch and the dinner on a given day be an ethnic meal without providing an alternate entree.
ENTREES	You should NEVER use the same type meat for both lunch and dinner on any given day. Provide for variety.
DEEP-FAT FRYING	Avoid having too many deep-fat fried items on a menu.
GUMBO	Gumbo is NOT soup; it should not be listed as such on a menu.
VARIETY	Menus should ALWAYS offer variety. Be especially careful not to have the same food on the same day each week.
COLOR CONTRAST	Be sure you always plan foods that have contrasting colors. This may not seem like such of a problem, but it is one of the biggest pitfalls in menu planning.
INDEX OF RECIPES	Use this to help you in your menu planning. If properly used, you can avoid many would-be problems.

NOTE: A meal need not consist of fancy foods. Plain, well-cooked foods are perfectly acceptable, particularly if they are attractively served.

RULE OF THUMB: Include a crisp, a firm, and a soft food in each of your menus.

14

NAVSUP FORM 1080 (REV. 8-73)

GENERAL MESS MENU (4061)

ACTIVITY	WEEK BEGINNING

	BREAKFAST	LUNCH	DINNER
MONDAY	*Chilled Oranges Chilled Apple Juice A La Carte Menu Grilled Ham Slices(L-65) Grilled Bacon Slices(L-5) Quick Coffee Cake(D-13) *Chilled Honeydew Melon	Chicken Noodle Soup(P-24) Parmesan Croutons(D-16) Baked Tuna and Noodle(E-124) Barbecued Beef Cubes(E-18) French Fried Potatoes(Q-45) Cauliflower Polonaise(Q-19) Buttered Green Beans(Q-G-3) Cole Slaw w/Cream Dressing(M-9) Garden Vegetable Salad(M-19) Russian Dressing(M-67) Baking Powder Biscuits(D-1) Butter Lemon Cake(G-32) Lemon Butter Cream Frosting(G-39 Cherry Crisp(E-8) Milk Tea Coffee	Meat Loaf(E-35) Roast Turkey(E-143) Natural Gravy(O-18) Mashed Potatoes(Q-57) Cranberry Sauce Buttered Asparagus(Q-G-3) Sauteed Corn(Q-27) Tossed Green Salad(M-47) Chiffonade Dressing(M-53) Apple Celery and Raisin Salad M50 Assorted Breads Butter Peach Pie(E-38) Chocolate Coconut Pudding(E-20) Milk Tea Coffee
TUESDAY	*Fresh Bananas Chilled Grapefruit and Orange Juice A La Carte Menu Corned Beef Hash(E-42) Grilled Bacon Slices(E-5) *Chilled Plums	Tomato Bouillon(P-5) Garlic Croutons(D-16) Braised Liver with Onions(E-54) Simmered Bratwurst(E-63) Mashed Potatoes(Q-57) Buttered Lima Beans(Q-G-1) Hot Spiced Beets(Q-9) Tossed Green Salad(M-47) Italian Dressing Cottage Cheese and Pineapple Salad(M-13) Frankfurter Rolls(D-33) Assorted Breads Butter Butterscotch Brownies(H-3) Chocolate Fudge Sundae Milk Tea Coffee	Breaded Pork Chops(E-85) Chilled Applesauce Beef Pot Roast(E-9) Vegetable Gravy(O-16) Buttered Potatoes Mashed Rutabagas(Q-58) Buttered Peas and Carrots(Q-G-3) Garden Vegetable Salad(M-19) Tangy Dressing(M-61) Cucumber and Sour Cream(M-16) Brown and Serve Rolls(D-33) Butter Devils Food Cake(G-12) Vanilla Frosting Blueberry Pie(E-74) Milk Tea Coffee
WEDNESDAY	*Chilled Apples Chilled Orange Juice A La Carte Menu Baked Bacon Slices(E-2) Grilled Sausage Links(E-88) Danish Pastry *Chilled Grapefruit Half	Grilled Succulent Steak(E-7) French Baked Potatoes(Q-50) French Fried Onion Rings(Q-55) Buttered Succotash(Q-G-3) Chef's Salad(M-7) French Dressing Pineapple Cheese Salad(M-39) Cloverleaf Rolls(D-33) Butter Blueberry Pie(E-11) Coconut Cream Pie(E-51) Milk Tea Coffee	Potato Soup(P-15) Crackers Frankfurters Cheese and Bacon Cottage Fried Potatoes(Q-46) Chili Macaroni(E-28) Ranch Style Baked Beans(Q-72) Parsley Buttered Carrots(Q-G-2) Tossed Vegetable Salad(M-48) Thousand Island Dressing Mixed Fruit Salad Creamy Fruit Dressing(M-56) Frankfurter Rolls(D-33) Assorted Breads Butter Devils Food Cake(G-12) Chocolate Butter Cream Frosting Ice Cream Lemon Cookies(H-21) MILK Tea Coffee
THURSDAY	*Chilled Grapefruit Half Chilled Tomato Juice A La Carte Menu Grilled Bacon Slices(E-5) Cream Beef on Toast(E-30) *Chilled Pears	Beef Rice Soup(P-11) Crackers Glazed Ham Loaf(E-56) Hot Sliced Beef Sandwich(N-35) Oven Browned Potatoes(Q-50) Baked Hubbard Squash(Q-61) Buttered Peas(Q-G-3) Lettuce salad(M-52) Celery Seed Dressing(M-52) Garden Cottage Cheese Salad(M-18 Assorted Breads Butter Chilled Sweet Cherries Brown Sugar Drop Cookies(H-15) Marble Cake(G-32) Mocha Butter Cream Frosting(G-30) Milk Tea Coffee	Spaghetti with Meat Balls(E-39) Grated Cheese Southern Fried Chicken(E-137) Cream Gravy(O-17) Mashed Potatoes(Q-57) Buttered Lima Beans(Q-G-3 Parsley Buttered Cauliflower Italian Style Chef's Salad(M-7) Vinaigrette Dressing(M-71) Assorted Relishes(M-G-2) Toasted Garlic Bread(D-7) Baking Powder Biscuits(D-1) Butter Strawberry Sundae Chilled Plums Sugar Cookies Milk Tea Coffee

Sample Cycle Menu
Week One

FRIDAY	Chilled Vegetable Juice Chilled Pineapple Juice A La Carte Menu Grilled Bologna Rings Baked Bacon Slices(L-2) Hashed Brown Potatoes(Q-46) Twist Coffee Cake(D-36)	Seafood Platter Seafood Cocktail Sauce(O-11) Roast Pork(L-81) Natural Brown Gravy(O-18) Potatoes Au Gratin(Q-51) Buttered Broccoli(Q-G-3) Southern Style Green Beans(Q-29 Lettuce Wedges(M-32) Cole Slaw w/Vinegar Dressing Bleu Cheese Dressing Corn Bread(D-15) Assorted Breads Butter Banana Cake(G-6) Banana Butter Cream Frosting Chilled Pears Oatmeal Cookies(H-23) Milk Tea Coffee	Corn Chowder(P-11) Cracker Braised Lam Chops(L-74) Mint Jelly Vealburger(L-97) Rice Pilaff(E-8) Buttered Peas(Q-G-3) Cream Style Corn Tossed Green Salad(M-47) Russian Dressing(M-67) Jellied Fruit Cocktail Salad(M-26) Baking Powder and Yeast Biscuits Butter Cheese Cake Chocolate Nut Sundae(K-5) Milk Tea Coffee
SATURDAY	*Chilled Cantaloupes Chilled Orange Juice A La Carte Menu Baked Bacon Slices(L-2) Grilled Ham Slices Hominy Grits(E-11) Pecan Rolls(D-36)	Beef Noodle Soup(P-1) Crackers Salisbury Steak(L-37) Polish Sausage(L-63) Hot Potato Salad(M-42) Stewed Tomatoes(Q-73) Buttered Brussels Sprouts(Q-3) Tossed Vegetable Salad(M-48) French Dressing Cabbage Apple & Raisin Salad M3 Sesame Seed Rolls(D-G-6) White Cake(G-30) Coconut Butter Cream Frosting Apricot Crisp(J-8) Milk Tea Coffee	Beef Stew(L-22) Buttered Noodles(E-4) Braised Spareribs and Sauerkraut Oven Browned Potatoes(Q-50) Buttered Succotash(Q-G-3) Lettuce Salad(M-32) Bacon Sour Cream Dressing(M-84) Carrot Raisin Salad(M-5) Assorted Breads Butter Gingerbread(G-17) Vanilla Sauce(K-13) Creamy Rice Pudding(J-22) Milk Tea Coffee
SUNDAY	*Chilled Peaches Chilled Grapefruit and Pineapple Juice A La Carte Menu Grilled Luncheon Meat(L-78) Grilled Sausage Patties(L-89) Hot Oatmeal Doughnuts(D-18)	Breaded Veal Steaks(L-99) Roast Beef(L-5) Natural Pan Gravy(O-18) Franconia Potatoes(Q-50) Buttered Green Beans(Q-G-3) Fried Parsnips(Q-38) Garden Vegetable Salad(M-19) Chilean Dressing(M-54) Cottage Cheese & Tomato Salad Onion Rolls(D-35) Butter Cherry Pie A La Mode(I-25) Fruit Cocktail Pudding(J-28) Whipped Topping(K-16) Milk Tea Coffee	Pea Soup(P-24) Parmesan Croutons(D-16) Baked Lasagna(L-25) Hot Turkey Sandwich(N-33) Mashed Potatoes(Q-57) Carrots Normandie(Q-17) Buttered Spinach w/Lemon Wedges Caesar Salad Waldorf Salad(M-50) Assorted Breads Butter Chilled Peaches Coconut Raisin Drop Cookie(H-14) Yellow Cake(G-32) Caramel Fudge Frosting(G-41) Milk Tea Coffee

The Food Service Officer is authorized to make changes to this menu when, due to unusual or unforeseen circumstances, it may be necessary to provide substitutions for food items not in stock or to permit timely use of perishable foods.

PREPARED BY	APPROVED (FOOD SERVICE OFFICER)	APPROVED (COMMANDING OFFICER)

NOTE: This sample three-week cycle menu, if properly used, can be a valuable aid to the menu planner. The breakfast menus are ala carte. This gives each crew member the opportunity to select his own food items. Each of the lunch and dinner menus includes two entrees, two starch items, two vegetables, and two or more desserts. The design of these menus is such that you can use each one "as is," or you may omit one entree, one starch item, one vegetable, and one dessert, still maintaining a balanced menu.

Sample Cycle Menu
Week One (Continued)

NAVSUP FORM 1089 (REV. 8-72)

GENERAL MESS MENU (4061)

ACTIVITY

WEEK BEGINNING

	BREAKFAST	LUNCH	DINNER
MONDAY	Chilled Oranges Chilled Pineapple Juice A La Carte Menu Grilled Bologna Rings Baked Bacon Slices(L-2) Hot Farina(E-2) Sugar Rolls(D-36-2) *Chilled Plums	Veal Parmesan(L-103) Yankee Pot Roast(L-9) Vegetable Gravy(O-16) Oven Browned Potatoes(Q-50) Broccoli Polonaise(Q-10) Scalloped Corn(Q-23) Spring Salad(M-44) French Garlic Dressing Waldrof Salad(M-50) Assorted Breads Butter Peach Pie(I-53-3) Chocolate Fudge Sundae Milk Tea Coffee	Knickerbocker Soup(P-18) Crackers Creole Shrimp(L-120) Steamed Rice(E-5) Swiss Steak with Brown Gravy L16 Glazed Carrots(Q-17) Buttered Brussels Sprouts Q-G-3 Lettuce Wedges(M-32) Celery Seed Dressing Pineapple Cheese Salad (M-39) Brown and Serve Rolls(D-33) Butter Lemon Meringue Pie(I-33) Sherbert Sugar Cookies(H-27) Milk Tea Coffee
TUESDAY	Chilled Kadota Figs Chilled Orange Juice A La Carte Menu Grilled Bacon Slices(L-5) Cream Beef on Toast(L-30) Hashed Brown Potatoes(Q-46) Cinnamon Sugar Doughnuts(D-18-4)	New England Fish Chowder(P-13) Crackers Meat Loaf(L-35) Mushroom Gravy(O-16) Fried Fish(L-109) Lemon Wedges Tartar Sauce(O-13) French Fried Potatoes(Q-45) Buttered Spinach(Q-G-3) Stewed Tomatoes(Q-73) Garden Vegetable Salad Italian Dressing Banana Salad(M-2) Texas Toast(D-7) Lemon Cake(G-32) Lemon Butter Cream Frosting Ice Cream Refrigerator Cookies(H-26) Milk Tea Coffee	Fried Rabbit(L-95) Braised Beef Cubes(L-148) Mashed Poatoes(Q-57) Brown Gravy(O-16) Buttered Beets(Q-G-1) Buttered Asparagus (Q-G-3) Tossed Green Slad(M-47) Mixed Fruit Salad Creamy Fruit Dressing(M-56) Cloverleaf Rolls(D-33) Butter Banana Cake(G-6) Banana Butter Cream Frosting Ice Cream Molasses Cookies(H-22) Milk Tea Coffee
WEDNESDAY	*Fresh Bananas Chilled Tomato Juice A La Carte Menu Baked Bacon Slices(L-2) Grilled Sausage Links(L-88) Hominy Grits(E-3) Home Fried Potatoes(Q-47) *Chilled Honeydew Melon	Pepper Pot Soup(P-22) Crackers Baked Ham(L-69) Chili Mustard Sauce(O-4) Savory Roast Lamb(L-77) Mint Jelly Parsley Buttered Potatoes(Q-77) Buttered Peas(Q-G-3) Corn Pudding(Q-22) Italian Chef's Salad(M-7-1) Cabbage Apple & Rasin Salad(M-3) Pan Rolls(D-33) Chocolate Chip Bread Pudding(J-16) Ice Cream Oatmeal Cookies(H-23) Milk Tea Coffee	Stuffed Green Peppers Tomato Sauce(O-15) Oven Fried Chicken(L-138) Mashed Potatoes(Q-57) Cream Gravy(O-17) Simmered Blackeye PeasQ-G-1 Vegetable Combo (Q-80-5) Caesar Salad Sliced Orange Salad Creamy Fruit Dressing(M-56) Baking Powder and Yeast Biscuits Butter Cheese Cake w/Strawberry Topping Fruit Cocktail Pudding(J-28) Milk Tea Coffee
THURSDAY	Fresh Apples Chilled Orange and Grapefruit Juice A L a Carte Menu Grilled Bacon Slices(L-3) Grilled Luncheon Meat(L-78) Hash Brown Potatoes(Q-46) *Chilled Cantaloup	Pepper Steak(L-13) Chili Con Carne(L-28) Steamed Rice Cottage Fried Potatoes(Q-46) Buttered Green Beans(Q-G-3) Creamed Onions(Q-33) Lettuce Salad(M-32) Celery Seed Dressing Mexican Cole Slaw(M-8) Assorted Breads Butter Crisp Toffee Bars(H-6) Fruit Cocktail Gelatin(J-7) Whipped Topping(K-16) Milk Tea Coffee	Seafood Platter Lemon Wedges Seafood Cocktail Sauce(O-11) Grilled Pork Chops(L-85-1) Mashed Potatoes(Q-57) Brown Onion Gravy(O-16) Baked Macaroni and Cheese(F-1-4 Buttered Succotash Q-G-3 Seasoned Greens(Q-29) Chef's Salad(M-7) Cole Slaw w/Creamy Dressing Corn Bread Butter Cherry Upside Down Cake w/ Whipped Topping(G-29) Yellow Cake(G-32) Brown Sugar Frosting(G-40) Milk Tea Coffee

Sample Cycle Menu
Week Two

FRIDAY	*Chilled Grapes Chilled Apple Juice A La Carte Menu Grilled Ham Slices(L-65) Grilled Sausage Patties(L-89) Hot Oatmeal(E-2) Bear Claws(D-G-7)	Pork Chop Suey(L-80) Steamed Rice(E-5) Chow Mein Noodles Hot Sliced Beef Sandwich(L-9) Mashed Potatoes(Q-57) Buttered Wax Beans(Q-G-1) Buttered Broccoli(Q-G-3) Lettuce,Cucumber, and Tomato Salad (M-46) Jellied Pear Salad(M-27) Brown and Serve Rolls(D-33) Butter Gingerbread(G-17) Vanilla Sauce(K-13) Ice Cream Chocolate Krinkle Cookies(H-13) Milk Tea Coffee	Vegetable Soup(P-7) Crackers Combination Pizza(D-31) Fried Ham Steaks(L-65) Grilled Potatoe Cakes(Q-57) Buttered Cabbage(Q-G-2) Scalloped Corn(Q-23) Garden Vegetable Salad(M-19) Italian Dressing Perfection Salad(M-36) Assorted Breads Butter Caramel Bread Pudding(J-14-1) Cherry Pie(I-53-2) Milk Tea Coffee
SATURDAY	*Chilled Fresh Peaches Chilled Vegetable Juice A La Carte Menu Corn Beef Hash Gilled Bacon Slices(L-3) Kolaches(D-27) *Chilled Grapefruit Segments	Grilled Strip Steaks(L-7) Sauteed Mushrooms, Peppers and Onions Potatoes On the Half Shell(Q-50) French Fried Onion Rings Au Gratin Asparagus(Q1-1) Tossed Vegetable Salad(M-48) Russian Dressing Assorted Relishes(M-G-2) Butterflake Rools(D-33) Butter Chilled Peaches Chocolate Chip Cookies(H-23) Strawberry Chiffon Pie(I-48) Milk Tea Coffee	Swedish Meat Balls(L-41) Buttered Noodles(E-4) Reuben Sandwiches(N-20) French Fried Potatoes(Q-45) Carrots Normandine(Q-17) Spring Salad(M-44) Sour Cream Dressing Cucumber,Onion and Radish Salad Assorted Breads Butter Yellow Cake(G-32) Orange Butter Cream Frosting Ice Cream Peanut Butter Cookies Milk Tea Coffee
SUNDAY	*Chilled Mellons Chilled Grapefruit Juice A La Carte Menu Grilled Sausage Links(L-88) Grilled Ham Slices(L-65) Home Fried Potatoes(Q-47) Quick Coffee Cake(D-15)	Chicken Noodle Soup(P-24) Crackers Tuna Salad Cold Plate Potato Chips Spaghetti with Meat Sauce(L-88) Grated Cheese Buttered Lima Beans (Q-G-3) Buttered Cauliflower(Q-G-3) Lettuce Salad(M-32) French Dressing Toasted Garlic Bread(D-7) Marble Cake(G-32) Chocolate Butter Cream Frosting Dutch Apple Pie(I-8-1) Milk Tea Coffee	Tomato Rice Soup(P-6-2) Roast Veal(L-98) Brown Gravy(O-16) Chicken Vega(L-127) Mashed Potatoes(Q-57) Buttered Mixed Vegetables French Fried Eggplant(Q-28) Tossed Vegetable Salad(M-48) Bacon Sour Cream Dressing Golden Glow Salad(M-20) Cluster Rolls(D-33) Butter Gingerbread(G-17) Vanilla Sauce(K-13) Blueberry Pie(I-53-1) Milk Tea Coffee

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PREPARED BY	APPROVED (FOOD SERVICE OFFICER)	APPROVED (COMMANDING OFFICER)

Sample Cycle Menu
Week Two (Continued)

18

NAVSUP FORM 1089 (REV. 8-72)

GENERAL MESS MENU (4061)

ACTIVITY

WEEK BEGINNING

	BREAKFAST	LUNCH	DINNER
MONDAY	Chilled Grape Juice Chilled Grapefruit Juice A La Carte Menu Grilled Ham Slices(L-65) Grilled Canadian Bacon(L-3-1) Hot Whole Wheat Cereal(E-2) Raised Doughnuts(D-19)	New England Boiled Dinner(L-43) Horseradish Ginger Pot Roast(L-9) Brown Gravy(G-16) Oven Glo Potatoes(Q-50) Lyonnaise Wax Beans(Q-7) Buttered Mixed Vegetables Garden Vegetable Salad(M-19) Bacon Sour Cream Dressing(M-84) Cottage Cheese & Peach Salad Assorted Breads Butter Chilled Plums Oatmeal Cookies(H-23) Devil's Food Cake(G-12) Mocha Butter Cream Frosting G-39 Milk Tea Coffee	Onion Soup(P-24) Parmesan Croutons(D-16) Hot Pork Sandwich(N-36) French Fried Potatoes(Q-45) Chili Con Carne(L-28) Steamed Rice(E-5) Buttered Mixed Vegetables(Q-G-3) Seasoned Greens(Q-29) Spring Salad(M-44) Vinegar and Oil(M-72) Cole Slaw w/Pineapple(M-5) Cloverleaf Rolls(D-G-6) Butter Bread Pudding(J-16) Hard Sauce(K-8) Apple Pie(I-10) Milk Tea Coffee
TUESDAY	*Chilled Oranges Chilled Apple Juice A La Carte Menu Baked Bacon Slices(L-2) Grilled Sausage Links(L-88) Hot Farina *Blueberry Muffins(D-30)	Swiss Steak with Brown Gravy L16 Turkey Pot Pie(L-132) Mashed Potatoes(Q-57) Southern Style Green Beans(Q-7) Mexican Corn(Q-27) Tossed Vegetable Salad(M-48) French Dressing Cucumber and Onion Salad(M-15) Assorted Bread Butter Marble Cake(G-32) Chocolate Frosting Peanut Butter Brownies(H-2) Milk Tea Coffee	Creamed Mushroom Soup(P-14) Crackers Barbecued Spareribs(L-92) Chicken Fried Steak(L-12) Baked Potatoes(Q-44) O'Brien Summer Squash(Q-64) Creamed Peas(Q-40) Lettuce and Tomato Salad (M-33) Bleu Cheese Dressing Carrot Raisin Salad(M-5-3) Pan Rolls(D-33) Butter Dutch Apple Bake(J-5) Rainbow Pie(I-44) Milk Tea Coffee
WEDNESDAY	*Fresh Apples Chilled Grapefruit and Orange Juice A La Carte Menu Grilled Ham Slices(L-65) Grilled Bacon Slices(L-3) Doughnuts(D-18) *Chilled Mellon	Old Fashioned Bean Soup(P-8-2) Savory Baked Chicken(L-140) Simmered Corned Beef(L-44) Horseradish Parsley Buttered Potatoes(Q-77) Southern Fried Okra(Q-32) Buttered Peas and Carrots(Q-G-3) Caesar Salad Jellied Banana Salad(M-22) Parkerhouse Rolls(D-G-6) Butter White Cake(G-30) Coconut Marshmallow Frosting Strawberry Shortcake w/Whipped Topping(G-16) Milk Tea Coffee	Baked Stuffed Pork Chops(L-84) French Fried Fish Portions(L-111 Lemon Wedges Tartar Sauce(O-13) Scalloped Potatoes(Q-53) Spanish Rice(E-9) Fried Cabbage(Q-12) Blackeye Peas and Bacon(Q-G-1) Chef's Salad(M-7) French Herbed Dressing Apple Pineapple and Celery Salad Corn Bread(D-15) Butter Spice Cake(G-25) Vanilla Frosting Lemon Chiffon Pie(I-32) Milk Tea Coffee
THURSDAY	Chilled Prunes Chilled Tomato Juice A La Carte Menu Grilled Luncheon Meat Cream Beef on Biscuits(L-30) Cottage Fried Potatoes(Q-46) *Glazed Doughnuts(D-18)	Tomato Vegetable Soup(P-24) Crackers Fried Ham Steaks(L-65) Salmon Cakes(L-114) Egg Sauce(O-1) O'Brien Potatoes(Q-49) Macaroni Salad(M-34) Buttered Mixed Vegetables Q-G-3 Broccoli Polonaise(Q-10) Spring Salad(M-44) Russian Dressing Cottage Cheese and Pineapple Assorted Breads Butter Chocolate Nut Sundae(K-5) Peach Pie(I-38) Milk Tea Coffee	Grilled Choice Steaks(L-7) Baked Potatoes(Q-44) Sauteed Mushrooms and Onions Vegetable Combo(Q80-3) Tossed Vegetable Salad(M-48) Vinegar and Oil dressing(M-72) Perfection Salad(M-36) Toasted Garlic Bread(D-7) Banana Cream Pie(I-51) Strawberry Gelatin w/Whipped Topping(J-10) Chewy Nut Bars(H-4) Milk Tea Coffee

Sample Cycle Menu
Week Three

FRIDAY	*Chiiled Grapefruit Half Chilled Pineapple Juice A La Carte Menu Baked Bacon Slices(L-2) Grilled Bologna Rings Hominy Grits Hashed Brown POtatoes(Q-54) *Cherry-Nut Coffee Cake(D13)	Chicken Noodle Soup(P-24) Crackers Baked Lasagna(L-25) Country Style Chicken(L-135) Mashed Potatoes(Q-57) Buttered Spinach w/Hard Cooked Eggs(Q-G-3) Corn on the Cob Tossed Vegetable Salad(M-48) Vinaigrette Dressing(M-71) Mixed Fruit Salad Cloverleaf Rolls Butter Sherbet Butternut Refrigerator Cookies Peanut Butter Brownies(H-2) Milk Tea Coffee	Seafood Platter Seafood Cocktail Sauce(O-11) Lemon Wedges Beef Pot Roast(L-9) w/Brown Gravy(O-16) French Fried Potatoes(Q-45) Steamed Rice(E-9) Buttered Asparagus(Q-G-3) Parsley Buttered Cauliflower Lettuce Salad(M-32) Thousand Island Dressing Assorted Relishes(M-G-2) Baking Powder Biscuits(D-1) Butter Lemon Meringue Pie(I-33) Devil's Food Cake(G-12) Chocolate Frosting Milk Tea Coffee
SATURDAY	*Fresh Bananas Chilled Tomato Juice Chilled Orange Juice A La Carte Menu Baked Bacon Slices(L-2) Corn Beef Hash(L-42) Danish Pastry(D-17) Chilled Peaches	Minestrone Soup(P-19) Crackers Creole Macaroni(L-151) Baked Knockwurst with Sauerkraut Potatoes Au Gratin(Q-51) Vegetable Combo(Q-80-1) Tossed Green Salad(M-47) Tangy Dressing Jellied Waldorf Salad(M-30) Pan Rolls(D-33) Butter Ice Cream Fruit Bars(H-7) Apple Crunch(J-27) Milk Tea Coffee	Sweet Sour Pork(L-82) Fried Rice(E-7) Chicken Fried Steak(L-12) O'Brien Potatoes(Q-49) Beets in Orange SauceQ-8-1 Buttered Cabbage(Q-G-2) Garden Vegetable Salad(M-19) Creamy Horseradish Dressing Cottage Cheese and Pear Salad Cluster Rolls (D-G-6) Butter Boston Cream Pie(G-32) Pineapple Upside Down Cake w/Whipped Topping(G-29) Milk Tea Coffee
SUNDAY	Chilled Grape Juice Chilled Orange Juice A La Carte Menu Grilled Sausage Links(L-88) Grilled Bacon Slices(L-3) Hot Oatmeal Apple Coffee Cake(D-11) *Stewed Prunes	Chicken Fried Beef Patties(L-152) French Fried Potatoes(Q-45) Pizza(D-31) Buttered Brussels Sprouts Q-G-3 French Fried Cauliflower(Q-20) Tossed Lettuce,Cucumber, and Tomato (M-46) Three Bean Salad(M-45) Assorted Breads Butter Chocolate Pie(I-29) Yellow Cake(G-32) Caramel Fudge Frosting(G-41) Milk Tea Coffee	Old Fashioned Bean Soup(P-8) Crackers Baked Italian Sausage(L-88) Tomato Sauce(O-15) Braised Beef Cubes(L-148) Buttered Noodles(E-4) Butttered Peas & Carrots(Q-G-3) Buttered Brussels SproutsQ-G-3 Lettuce Wedges(M-32) Thousand Island Dressing Texas Toast(D-7) Fruit Salad(M-17) Butter Sherbet w/Brownies Blueberry Shortcake Pie(I-3) Milk Tea Coffee

The Food Service Officer is authorized to make changes to this menu when, due to unusual or unforeseen circumstances, it may be necessary to provide substitutions for food items not in stock or to permit timely use of perishable foods.

PREPARED BY	APPROVED (FOOD SERVICE OFFICER)	APPROVED (COMMANDING OFFICER)

Sample Cycle Menu
Week Three (Continued)

THE DAILY FOOD GUIDE

The Daily Food Guide provides a "grouping" of foods (these are known as the Basic Four Food Groups) according to the nutrients which are supplied by each. It should be noted that most foods provide more than one nutrient, but no single food provides all the nutrients which are necessary for good health. It is, therefore, necessary that the diet include a variety of foods. A good menu planner must take this factor into account.

The use of the Daily Food Guide helps pinpoint the foods that contain the key nutrients for: (1) energy, (2) building and repairing body tissue, and (3) regulating body functions. It enables you to furnish well-balanced meals without having to analyze each food item yourself. You do not have to determine the value of the food you are providing. This is already done for you.

The Basic Four Food Groups are:

- MILK
- MEAT
- VEGETABLE/FRUIT
- BREAD/CEREAL

By using the basic groupings in the quantities indicated for each group (stated as numbers of servings), you will be providing a major portion of the required vitamins and minerals. You will also be providing necessary proteins, fats, and carbohydrates. Of course, this does not form the total menu. Additional servings of these and other foods are included to round-out the meal and make it more appetizing.

Foods which are not included in these four groups are butter and other fats, oils, sugars, and unenriched grain products. These are usually combined with "grouped" foods. They are often used in mixed dishes, baked goods, desserts, and other dishes. Fats, oils, and sugars enhance or change flavor and improve appetite appeal.

Milk Group (Two or more servings daily)

Foods from the milk group provide calcium, protein, and vitamins. The group includes:

Whole milk
Skim milk
Buttermilk
Whole or nonfat dry milk
Evaporated milk

ALTERNATES for the milk group are:

Cheese (Cheddar-type, processed, or natural)
Cottage cheese
Cream cheese
Ice cream

The minimum amount of milk or milk substitute required per day is two cups. The following amounts, however, are recommended:

Children under 8	- 2 or more cups
Children 8 to 12	- 3 or more cups
Teenagers	- 4 or more cups
Adults	- 2 or more cups

Meat Group (Two or more servings daily)

Meat is the main source of protein in the diet. In addition, it contains essential minerals and vitamins. Included in the meat group are:

Beef
Pork
Veal
Lamb
Meat Products
Rabbit
Poultry
Eggs
Seafood

ALTERNATES for the meat group are:

Dry peas
Dry beans
Nuts
Peanut butter

You may count each of the following as one serving:

2 to 3 ounces of lean cooked meat, poultry, or fish (without bone or fat)
2 eggs
1 cup cooked dry beans or peas
4 tablespoons peanut butter

Vegetable-Fruit Group (Four or more servings daily)

All vegetables and fruits are included in this group. They furnish primarily vitamins A and C. They do, however, provide some of most other nutrients as well as cellulose (bulk). The Daily Food

Guide emphasizes those foods that are valuable sources of vitamins A and C.

The servings should include at least one citrus fruit or other fruit or vegetable which is high in vitamin C. This serving could be selected from the following list:

Orange (or juice)	Fresh pineapple
Grapefuit (or juice)	Honeydew melon
Cantaloup	Tomato
Strawberries	Cabbage
Mango	Brussels sprouts
Papaya	Broccoli
Guava	Green pepper
Watermelon	Potato, cooked in skin
Tangerine	Sweet, red pepper
Asparagus	

The servings should include a dark-green vegetable or deep-yellow vegetable or fruit which is high in vitamin A. You should have at least one of these every other day. The serving could be selected from the following list:

Carrot	Collards
Sweet potato	Kale
Apricots	Spinach
Cantaloup	Broccoli
Pumpkin	Turnip greens
Persimmon	Garden cress
Winter squash	Mustard greens
Mango	Dandelion greens
Chard, leaves	Beet greens

Your other servings may be selected from the following:

Apple	Corn
Banana	Cucumber
Berries	Green beans
Cherries	Lettuce
Grapes	Lima beans
Peach	Onion
Pear	Peas
Plum	Potato
Asparagus	Rhubarb
Beets	Rutabaga
Cauliflower	Turnips
Celery	

You may count each of the following as one serving:

1/2 cup vegetable or fruit
1 medium apple, orange
1 banana
1 potato
1/2 grapefruit
1/2 cantaloup

Bread-Cereal Group (Four or more servings daily)

Bread and cereal furnish many of the B complex vitamins plus protein and iron. They are the largest supplier of carbohydrates. Foods included in this group are breads and cereals that are whole grained, enriched, or restored. Specifically, this group includes:

Bread	Cornmeal
Rolls	Grits
Quick breads	Crackers
Cereals, ready-to-eat and cooked	Flour
	Rolled oats
Rice	
Macaroni, spaghetti, noodles	

If no cereals are to be served, allow an extra serving of bread or baked goods which will make at least 5 servings for this group daily.

You may count each of the following as one serving:

1 slice of bread
1 ounce of ready-to-eat cereal
1/2 to 3/4 cup cooked:
cereal
cornmeal
grits
macaroni
noodles
rice
spaghetti

Extras — Fats and Sweets

Individual energy needs and the number and size of servings from food in the Basic Four will help determine the amounts of these "extras" you may include. The following items are considered "extra."

Butter
Margarine
Salad dressing
Jam
Jelly
Other sweets

These are generally added to meals to help make them more satisfying.

MEAL QUESTIONNAIRE

Please rate the foods for the meal you just ate. Use the following 1-5 scale:

5 - Great!
4 - Pretty good
3 - Fair
2 - Could be better
1 - Terrible

On the line beside each category, give the specific name of the food you are rating. (Circle your response)

A. Main dish	_____	1	2	3	4	5
B. Other main dish	_____	1	2	3	4	5
C. Vegetable	_____	1	2	3	4	5
D. Vegetable	_____	1	2	3	4	5
E. Potato	_____	1	2	3	4	5
F. Other starch	_____	1	2	3	4	5
G. Salad	_____	1	2	3	4	5
H. Soup	_____	1	2	3	4	5
I. Dessert	_____	1	2	3	4	5
J. Bread/Cereal	_____	1	2	3	4	5
K. Beverage	_____	1	2	3	4	5

Overall, how would you rate the meal you just ate? 1 2 3 4 5

RESPONDENT'S NAME _____
(Optional)

Illustration 1-2: Sample Food Preference Questionnaire

FOOD PREFERENCE RATINGS

In addition to using the Daily Food Guide when planning your menus, you should also determine which foods are liked best by those you serve. It is often helpful to consider what they do NOT like too.

There are several ways of determining the food preferences of those you serve:

- Keep a systematic record of those foods which are selected most frequently from the serving line.
- Check the trays at the scullery to see which foods are uneaten.
- Devise a food preference questionnaire to obtain written opinions. This type check is probably best if it is designed for a single meal. A sample questionnaire which was designed to test food preferences for one meal at a time is shown in Illustration 1-2.

The menu planner can design any other feasible type method for checking food preferences of the crew.

FOOD ACCEPTANCE RECORDS

At units where Food-Preparation Worksheets (NAVSUP-1090) are used, computing an acceptance factor is a requirement. This information is helpful for future menu planning.

EXAMPLE: If you serve 150 portions of green beans at a meal attended by 225 people, the acceptance factor is computed as follows:

$$\frac{150 \text{ (portions served)}}{225 \text{ (meal attendance)}} = 0.67 \text{ (acceptance factor)}$$

This means that 67% of the people who attended the meal selected green beans.

Once the acceptance factor has been computed, you can use this percentage to estimate the number of portions of green beans you need to prepare the next time you plan to serve them.

EXAMPLE: If 175 are to attend the meal, compute the portions you need to prepare as follows:

```
  175 (persons to attend meal)
X.67
 1225
1050
117.25 or 117 (portions to prepare)
```

MEAL ATTENDANCE RECORDS

Meal attendance records may be kept to aid the menu planner in PREDICTING the number of people that will attend each future meal.

On CG ships, attendance predictions are based on personnel actually on board. This number is usually uniform during patrols and lengthy deployments. The number does, however, vary considerably during long in-port periods because of transfers, liberty, and leave.

At shore units, particularly large ones, the Ration Memorandum (CG-3123) is a valuable tool for the menu planner when making meal attendance predictions. This form provides the number of personnel on board who are entitled to rations in kind. Of course, there is no guarantee that all of these people will attend each meal. A fairly accurate prediction can be made, however, by considering this number along with the number of sales of individual meals for the previous day. Another consideration when using CG-3123 is that it is a fairly reliable predictor for noon meal attendance, but the menu planner should not rely upon it for morning and evening meal attendance. Attendance at these two meals varies considerably, depending upon pay days, liberty, and weather. The BEST predictor for attendance at these meals is a head count at the door.

FOOD CONSUMPTION RECORDS

Food consumption records are good to plot the frequency with which certain food are served. These records, used in conjunction with a current Provision Ledger (CG-4246), provide the menu planner with a list of available food items as well as a list of foods most often used. It also helps the menu planner compile a list of items to be procured.

INDEX OF RECIPES

The Index of Recipes, issued with the Armed Forces Recipe Service, is an outstanding guide for

24

planning menus for the enlisted dining facilities (EDF's). The recipes listed in the Index are organized according to the recommended sequence of listing major items on the menu. The Index also lists miscellaneous information included in the AFRS.

REQUIREMENTS TABLES

The Normal Subsistence Requirements Table lists the most commonly used food items with the average quantity needed for 100 people for 30 days. This is a valuable tool for the menu planner who plans for extended voyages. This table is provided in the Subsistence Support Manual (COMDTINST M4061.3).

AVAILABILITY OF FOODS

The menu planner should utilize fresh fruits and vegetables when they are available. Frozen and preserved foods should be used when fresh ones are not available.

CLIMATIC CONDITIONS

When planning menus, another major consideration should be climatic conditions under which your crew works. If they work primarily outside in the cold, you need to plan for extra "fuel" foods (this is necessary because more calories are utilized to produce heat for warming the body). These "high calorie" menus should include foods which are rich in carbohydrates, fats, and protein. You should also bear in mind that individual preferences for food will change seasonally.

By the same token, people who work in the heat also expend much energy and need extra energy foods. Menus that combine heavy and light meals should be planned. For people who are exposed to the sun for long hours, you should choose lean beef, veal, and poultry as entrees. You should also use a wide variety of beverages.

EQUIPMENT AND PERSONNEL

The way food is prepared for serving depends upon galley equipment, the number of personnel to be fed, and the number of subsistence personnel that are available for preparation of the meal.

FOOD COSTS

One of the primary restrictions placed on the menu planner is that of cost. All menus must be planned within the expenditure limitations of each individual unit. Luxury (high cost) items should be kept to a minimum. If they are used, less costly items must be used elsewhere on the menu to balance out the budget.

MAJOR MEAL COMPONENTS

ENTREE

Meals should be planned around the entree (main dish). Care must be taken when selecting the entree because it constitutes up to about 40 percent of the total meal cost. Also, the entree determines what other foods will be served.

The majority of consumers prefer beef, chicken, pork, veal, and lamb (in that order). Shrimp and tuna are high on the list of fish selections.

The menu planner must decide on garnishes, relishes, and accompaniments to the entree which is offered. Monotony should be avoided. Remember that even the "old time favorites" can always be changed a little to offer variety so that your menus will NOT become monotonous. Plan your meals to utilize leftovers, but avoid using too many "obvious" leftover dishes. For variety, plan to serve something besides mint jelly with lamb and something besides applesauce when you serve pork.

VEGETABLE

The vegetables you select to serve should always complement the entree in caloric content, color, texture, taste, and method of preparation. You should include potatoes, rice, and/or noodles on every noon and evening menu. It is even suggested that two forms of potatoes be served; this can be done at relatively little cost.

SALADS

Salads increase the variety, acceptability, and nutritional content of the meal. An increased variety of salads should be offered in addition to the daily menu choices, whenever possible. Salad bars are recommended as a means of adding interest to the meal and to expedite that portion of the food service.

Simple set-ups are easiest to keep neat and clean. If you have small containers of salads which can be replaced several times during the meal, they will

stay crisper and neater than one larger salad. Preportion and garnish individual servings of salads whenever feasible.

A variety of crackers or bread sticks may be offered as an accompaniment. For a gourmet touch, offer croutons, bacon bits, grated cheese, etc to sprinkle over green salads. Salad dressings are listed in the Salad Bar Suggestions.

The success of the salad bar depends, in part, upon the ingenuity of the food service personnel. The number of salad bar combinations is almost limitless when short season vegetables and fruits are included in the selection. Choose salads which will contrast with the main part of the meal and enhance eating pleasure. Avoid duplication of food flavor between menu items and salad bar selections.

On pages 1-18 and 1-19 of this assignment, you will find suggestions for salad bars and also suggestions for relish trays. Note the variety – this is the key to the success of your entire meal!

DESSERTS

The dessert is probably the most time-consuming portion of the meal to prepare. It is often the most difficult to store. You should, however, always prepare selections from both the heavy desserts (pies and cakes) and the light ones (gelatin, cookies, fruits, and ices). Not only should desserts satisfy the appetite, but they should be a major portion of the caloric value of the meal.

APPETIZERS AND SOUPS

Appetizers and soups are the least expensive part of the meal pattern, and an adequate variety of these should be offered.

At the very least, juices and soups should be offered. Juice selections should include at least one fruit and one vegetable variety. Soups should be offered in both the lighter or clear types and the heavier forms such as creamed or pureed soups.

Color, flavor, and texture should be considered in this course offering. In complete dinner menus, light appetizers or soups should accompany heavier entree items and vice versa. Seafood items, in many forms, provide variety and customer satisfaction at this course.

BEVERAGES

Using the traditional coffee, tea, and milk as the point of departure, most menus can be enhanced by greater variety in beverage offerings. Chocolate milk is a favorite drink in the Enlisted Dining Facility (EDF), and it can be served either hot or cold. Fruit drinks and carbonated beverages are refreshing cold drinks.

GUIDELINES FOR PLANNING BREAKFAST MENUS

When you plan breakfast menus, you should include the following:

1. A choice of orange juice, one other juice, and a fruit (preferably fresh).

2. A choice of hot cereals and at least four different ready-to-eat cereals.

3. Eggs to order, including omelets.

4. A choice of griddle cakes or French toast.

5. At least one breakfast meat. EXCEPTION: When creamed beef, hash, or similar meat product is served, another meat should also be provided.

6. Potatoes or a potato substitute, such as hominy grits, should be offered at least three times a week.

7. Toast and at least one breakfast pastry or doughnut.

8. Butter (or margarine where authorized), syrup, and choice of two or more spreads (jam, jelly, peanut butter, etc.).

9. Milk, coffee, and tea. Cocoa is to be served upon request.

DAILY ALA CARTE BREAKFAST MENU
(Basic Format)

° Chilled Fruit and Juice
Ready-to-Eat Cereal
° Hot cereal
Fresh Milk
Eggs to Order
Griddle Cakes w/Maple Syrup
French Toast w/Maple Syrup

SALAD BAR SUGGESTIONS

MON	TUE	WED	THU	FRI	SAT	SUN
1. TOSSED	CHEF'S	GARDEN	TOSSED	CHEF'S	VEGETABLE	CAESAR
2. MEXICAN COLE SLAW	COTTAGE CHEESE w/ PEACH	PINEAPPLE COLE SLAW	COTTAGE CHEESE w/ PINEAPPLE	SLAW (VINEGAR)	CONFETTI	COTTAGE CHEESE w/ PEAR
3. WALDORF	MACARONI	POTATO	FRUIT	MACARONI	WALDORF	GRAPEFRUIT/ ORANGE
4. JELLO ORANGE	JELLO LIME	JELLO CHERRY	JELLO LEMON	JELLO STRAWBERRY	JELLO LIME	JELLO CHERRY
5. TUNA	SALMON	SARDINE	SHRIMP	CHICKEN	TUNA	TURKEY
6. AVOCADO	LETTUCE WEDGES	CUCUMBER/ONION	AVOCADO	LETTUCE WEDGES	CUCUMBER/ONION	PEA/PICKLE AND CHEESE
7. BEET/ONION	THREE-BEAN	CARROT/RAISIN	THREE-BEAN	BEET/ONION	THREE-BEAN	CARROT/RAISIN
8. TOMATO WEDGE	CARDINAL	PINEAPPLE/ CHEESE	TOMATO WEDGE	CARROT/CELERY/ APPLE	BANANA	CARDINAL
9. JELLIED BANANA	JELLIED FRUIT COCKTAIL	GOLDEN GLOW	SHIMMERY FRUIT-VEGETABLE	PERFECTION	SPRING	GOLDEN GLOW
GARLIC CROUTONS CRACKERS	CELERY CROUTONS CRACKERS	CHEESE CROUTONS CRACKERS	ONION CROUTONS CRACKERS	GARLIC CROUTONS CRACKERS	CELERY CROUTONS CRACKERS	CHEESE CROUTONS CRACKERS
DRESSINGS ITALIAN	1000 ISLAND	CREAMY FRUIT	PIQUANT	RUSSIAN	CHIFFONADE	1000 ISLAND
DAILY ZERO VINEGAR FRENCH BLEU CHEESE						

SALAD BAR SUGGESTIONS

1-18

RELISH TRAY SUGGESTIONS

FRESH ITEMS	CANNED RELISHES	DIET SELECTIONS
1. CARROT STICKS	SWEET PICKLES	DICED CHEDDAR CHEESE
2. CELERY HEARTS	JALEPENO PEPPERS	HARD COOKED EGGS
3. CUCUMBER WEDGES	MIXED PICKLES	BEAN SPROUTS
4. RADISHES	CHERRY PEPPERS	CHICKEN (TURKEY/TUNA/SALMON), CANNED
5. BELL PEPPER RINGS	GREEN OLIVES	SAURKRAUT, CANNED
6. GREEN ONIONS	RIPE OLIVES	GRAPEFRUIT SECTIONS, CANNED, DRAINED
7. CHERRY TOMATOES	DILL PICKLES	SPINACH, CANNED
8. FRESH CAULIFLOWER	GARBANZO BEANS	CARROTS, CANNED, DRAINED
NOTE: BASED UPON AVAILABILITY/WORKLOAD AND EDF MENU SELECTIONS, THE NUMBER OF ITEMS FROM EACH CATEGORY LISTED MUST BE AT LEAST: FRESH - 5 ITEMS; CANNED - 3 ITEMS; DIET - 2 ITEMS		
APPLESAUCE	LEMON WEDGES	DICED ONIONS
CRANBERRY SAUCE	SOUR CREAM	PREPARED MUSTARD
TACO SAUCE	HORSERADISH	LETTUCE LEAVES
TARTAR SAUCE	ONION DIP	PICKLE RELISH
SEAFOOD COCKTAIL	MINT JELLY	SLICED TOMATOES
NOTE: ACCOMPANIMENTS WILL BE OFFERED TO COMPLEMENT MENU SELECTIONS AS REQUIRED		

28

* Meat
* Potatoes
* Special Hot Breads
Toast-Butter
Jam or Jelly
Tea-Coffee

* These foods are indicated on the breakfast portions of the cycle menus provided on pages 1-6 through 1-11.

The menu pattern for the ala carte breakfast is as indicated above. The items identified with an asterisk must also be listed in the cycle menu. Ready-to-eat cereals, fresh milk, eggs, bread, butter, coffee, and sugar should also be issued daily.

The daily quantity to be prepared should be based on the preferences of the personnel subsisting in each dining facility.

GUIDELINES FOR PLANNING NOON AND EVENING MEALS

When you plan noon and evening menus, you should include the following:

1. A choice of two different types of entrees (if it is within your daily monetary allowance). EXCEPTION: Serve only one entree when you serve grilled steak.

NOTE: Be careful to NOT become repetitious in entrees which you prepare.

2. An appropriate sauce, gravy, or garnish should be planned to accompany the entrees.

3. Potatoes and/or potato substitute.

4. Two or more cooked vegetables, one of which should be a dark green or deep yellow.

NOTE: Not more than one gas-forming cooked vegetable such as cabbage, cauliflower, broccoli, onions, brussel sprouts, or dried beans should be offered at a meal.

5. A choice of at least two salads. When a salad bar is provided, at least three, but not more than five, salads should be offered at each meal; one should be a raw leafy-green vegetable-type salad.

NOTE: The selection of salads for each meal should be varied to avoid repetitious serving of the same salads.

6. Salad dressing, vinegar and oil, and a choice of Blue Cheese, Thousand Island, French, or Italian dressings. Additional dressings may be offered when appropriate to salad selections.

7. Not less than two choices of bread (white, whole wheat, or rye) or one choice of hot rolls, muffins, or biscuits.

8. Butter (or margarine when authorized) and choice of two more spreads (jam, jelly, peanut butter, etc.).

9. At least one soup; the type should vary from noon to evening meal and from day to day.

10. A choice of two or more different types of desserts. Cookies may be served as an accompaniment to ice cream, pudding, or gelatin; cookies alone should not be offered as a dessert choice. Fruits should be offered if the customers request them.

11. Milk, soft drinks, coffee, and tea.

GUIDELINES FOR PLANNING SHORT ORDER MEALS

Short order meals have proven to be highly acceptable in enlisted dining facilities. Served in conjunction with the regular meal, they should offer the customer a choice. The variety that can be offered on the short order menu is almost endless when specialty items and ethnic foods are included in the selections. The majority of short order items should be "short order" or "grilled to order" items. Timely preparation of all food is vital for the happy satisfied customer.

STANDARD FORMAT FOR SHORT ORDER MENUS

* Soup w/Crackers
Hamburger/Cheeseburgers
Frankfurters
Chili Con Carne
** Specialty of the meal (one or more)
Peanut Butter and Jelly Sandwiches
French Fries Potatoes

Potato Chips/Corn Chips
* Assorted Salads & Salad Dressings
Hamburger Rolls
Frankfurter Rolls
* Assorted Desserts
* Choice of Beverages

Recommended accessory (condiment) items that should be available for each meal service:

Catsup
Mustard
Salad Dressing
Pickle Relish
Worcestershire Sauce
Chopped Onions
Sliced Tomatoes
Shredded Lettuce

Additional suggestions for variety of accessory items are:

Crumbled Cheese
Pickles
Sliced Olives
Chili Sauce
Baked Beans
Sauteed Onions and Mushrooms
Horseradish
French Fried Onion Rings

* Selected from the cycle menu (not shown on sample provided).

** Selected from the Specialty of the Meal Suggestions.

SPECIALTY OF THE MEAL SUGGESTIONS

Select one or more of the following items to offer as the "Specialty of the Meal." Select carefully the menu item to be offered to provide the maximum variety to the dinner.

Grilled Cheese Sandwiches N-6
Barbecued Beef (Sloppy Joe) N-27
Grilled Ham Sandwiches N-6-3
Bacon, Lettuce and Tomato Sandwiches N-1
Hot Pastrami Sandwiches N-23
Cannonball Sandwich N-22
Grilled Ham and Cheese Sandwiches N-6-3
Grilled Cheese and Bacon Sandwiches N-6
Fishwich N-32
Submarine Sandwich N-19
Italian Submarine Sandwich N-19-1
French Toasted Ham and Cheese Sandwiches
Corned Beef and Cheese Sandwiches N-9
Western Sandwiches N-18
Pizza: Plain D-31, Mushroom D-31-1, Sausage, Salami, Pepperoni D-31-2
Tuna Salad Sandwiches N-15
French Toasted Bacon and Egg Sandwiches N-2
Cheese and Bologna Sandwiches N-5
Egg Salad Sandwiches N-10
Salmon Salad Sandwiches N-15
Baked Ham Sandwiches N-11
Deviled Ham Sandwiches N-12
Grilled Cheese and Tomato Sandwiches N-6
Tacos N-21
Turkey Salad Sandwiches N-8
Reuben Sandwich N-20
Hot Sausage Sandwich N-22
Enchilada L-105
Burritos
Egg and Ham Salad Sandwiches N-10
Club Sandwiches
Sliced Corned Beef Sandwiches N-9
Italian Beef Pepper Sandwich N-28-2
Cold Platters

SAMPLE SHORT ORDER MENU #1

Pea Soup P-24-3 w/Crackers
Grilled Hamburgers N-29
Grilled Cheeseburgers N-29-1
Chilled Frankfurters N-30-1
Chili Con Carne
French Toasted Ham and Cheese Sandwiches*
Peanut Butter and Jelly Sandwiches N-14
French Fried Potatoes Q-45-1
Potato Chips/Corn Chips
Lettuce Wedge M-32 w/Thousand Island Dressing M-70
Jellied Pear Salad M-27 Salad Dressings
Hamburger Rolls
Frankfurter Rolls
Pineapple Upside Down Cake G-29 w/Whipped Topping K-16
Brownies H-2
Milk, Tea, Coffee
Soft Drinks
Milkshakes
Condiments and Accessory Items

* Follow ingredients for N-6-3 and preparation instruction for N-2.

SAMPLE SHORT ORDER MENU #2

Tomato Bouillon P-5 w/Crackers
Grilled Hamburgers N-29
Grilled Cheeseburgers N-29-1
Grilled Frankfurters M-30-1
Chili Con Carne
Western Sandwiches N-18
Peanut Butter and Jelly Sandwiches N-14
French Fried Potatoes Q-45-1
Potato Chips/Corn Chips
Cole Slaw w/Cream Dressing M-9
Garden Vegetable Salad M-19 w/Russian Dressing M-67
Hamburger Rolls
Frankfurters Rolls
Lemon Cake G-32-8 w/Lemon Butter Cream Frosting G-39-4
Cherry Crisp J-8-2
Milk, Tea, Coffee
Soft Drinks
Milkshakes
Condiments and Accessory Items

GUIDELINES FOR PLANNING ETHNIC MEALS

Ethnic type foods are becoming increasingly popular with Coast Guard diners. Many dining facilities are serving special dinners featuring these foods. Not only do these meals add to the variety of your menus, but they also are quite pleasing to the specific ethnic groups.

The following menus are suggested to assist in the planning of these meals. Food service personnel at local levels should determine what ethnic foods are most popular with their patrons and plan accordingly. To make the occasions more festive, appropriate decorations and music should also be featured, and the meals should be well advertised in advance to prepare the diners for the type of food being served.

SAMPLE ETHNIC MENU #1

"SOUL" DINNER

Mulligatawny Soup P-20 with Crackers
Stewed Chitterlings L-90 Simmered Pigs Feet L-71-1
Southern Fried Chicken L-137 Cream Gravy O-17
Candied Sweet Potatoes Q-67 Fried Rice E-7
Simmered Black-Eyed Peas Q-5 Southern Style Greens Q-29
Cole Slaw M-8
Hot Corn Bread D-14 Butter
Pecan Pie I-40 Applesauce Cake G-2 with Butter Cream Frosting G-39
Coffee C-5 Milk Tea C-12 Soft Drinks

Additional Suggestions

Bean Soup P-8
Barbecued Country Ribs L-92-1
Deep-Fat Fried Fish L-108
Creole Shrimp L-120
Hashed Brown Potatoes Q-46
Southern Fried Okra Q-32
Potato Salad M-40
Hush Puppies D-14-2
Stewed Tomatoes Q-72
Corn Fritters Q-21
Gingerbread G-17
Baked Apples J-3
Sweet Potato Pie I-49

SAMPLE ETHNIC MENU #2

ORIENTAL DINNER

Beef Noodle Soup P-1-2 with Crackers
Sukiyaki L-6 Tempura Fried Shrimp L-121-1
Steamed Rice E-5 Fried Rice E-7
Broccoli Polonaise Q-10 Fried Cabbage Q-12
Chow Mein Noodles*
Sliced Cucumber and Onion Salad M-15
Coconut Custard Pudding J-14-3 Ice Cream
Coffee C-5 Milk Tea C-12 Soft Drinks

Additional Suggestions

Egg Rolls*
Egg Foo Young with Sauce F-9
Pineapple Chicken L-139
Barbecued Pork L-79
Chicken Chow Mein L-150
Pork Chop Suey L-80
Sweet Sour Spareribs L-94
Baked Fish L-106
Rice Pilaf E-8
Peas with Mushrooms Q-41
Buttered Asparagus Q-G-3
Jellied Pear Salad M-27
Fresh Fruit Cup
Sherbet with Ginger Fruit Bars H-7-1

SAMPLE ETHNIC MENU #3

POLYNESIAN DINNER

South Seas Cocktail B-2
Barbecued Pork Loin L-79 Teriyaki Steak L-8
Shrimp Salad L-123
Baked Sweet Potatoes Q-66 Fried Rice E-7
Sweet Sour Greens Q-29-1
Banana Salad M-2
Nut Muffins D-30-2 Butter
Pineapple Chiffon Pie I-43 Coconut Cream Pie I-51-3
Coffee C-5 Milk Tea C-12 Soft Drinks

Additional Suggestions

Ambrosia J-6-1
Sweet Sour Spareribs L-94
Tempura Fried Shrimp L-121-1
Pineapple Chicken L-139
Coconut Rice Pudding J-15-1
Fresh Pineapple and Banana Compote
Lime Sherbet – Coconut Raisin Cookies H-14

32.

SAMPLE ETHNIC MENU #4

ITALIAN DINNER

Minestrone
(Minestrone Soup P-19 with Croutons D-16)

Lasagna
(Baked Lasagna L-25)

Spaghettini con Polpettine
(Spaghetti with Meat Balls L-39)

Pizza alla Salsiccia con Peperoni
(Pepperoni Pizza D-31-2)

Insalata Verdi all 'acceto e olio with Parmesan Croutons D-16-1
(Tossed Green Salad M-47 with Vinegar and Oil Dressing M-72)

Pane Abbrustolito Aglio
(Toasted Garlic Bread D-7)

Burro
(Butter)

Spumoni
(Spumone Ice Cream J-6-3)

Caffee
(Coffee C-5)

Latte
(Milk)

Te
(Tea C-12)

(Soft Drinks)

Additional Suggestions

Antipasto
Veal Parmesan L-103
Chicken Cacciatore L-130
Italian Style Veal Steaks L-101
Fried Eggplant Parmesan Q-28-1
Ravioli with Meat*
Ravioli with Cheese*
Fried Zucchini Q-63
Ice Cream Filled Eclairs J-26-1
Fresh Fruit
Assorted Cheese
Sponge Cake G-27 w/Apricot Sauce K-1

38

SAMPLE ETHNIC MENU #5

MEXICAN/SPANISH DINNER

Guacamole Canapes
(Avocado Salad M-82 with Corn Chips)

Enchiladas de Carne
(Beef Enchiladas L-105)

Tacos N-21

Puerco Mexicana
(Mexicana Pork L-87)

Beef Tamales*

Arroz Suriano
(Spanish Rice E-9)

Frijoles Refritos
(Refried Beans Q-75)

Maiz
(Mexican Corn Q-72-2)

Ensalada de Frijoles
(Frijole Salad M-77)

Jalapeno* & Cherry Peppers*

Tortillas*

Pudin de Pan
(Bread Pudding J-16)

Gelatin de Fruta
(Fruited Gelatin J-7)

Cafe
(Coffee C-5)

Leche
(Milk)

Te
(Tea C-12)

Soft Drinks

Additional Suggestions

Cheese Enchiladas*
Beef Burritos*
Tamale Pie L-147
Assorted Relishes (ripe olives, tomatoes, green peppers)
Bean Soup P-8
Spanish Steak L-14
Baked Fish L-106
Chicken Vega L-127
Pork Adobo L-33
Chili Con Carne with Beans L-28

34

GUIDELINES FOR PLANNING LOW-CALORIE MEALS

Since weight control programs continue to be an integral part of the military system, SS personnel have the responsibility of providing meals which offer some low-calorie foods. Attention can be drawn to these special foods by labeling them or even by making special low-calorie displays on the serving line. You must remember, however, that your low-calorie menus must also be planned according to the same standards as your regular menus. You must still provide nutritious foods from each of the Basic Four Food Groups. It is actually up to the consumer to eliminate the "extras," such as sauces, gravies, pastries, and toppings. You should always base your low-calorie menus on your basic menus. If your consumers have special dietary needs, you may want to consult a dietitian or a corpsman to obtain professional advise on the subject.

SPECIAL CALORIE-WISE HINTS

- Use unsweetened fruits and juices
- Decrease portion sizes
- Broil, poach, bake, or scramble instead of frying
- Use sugar substitutes
- Trim all excess fat from meats
- Use bouillon or broth instead of creamed soups
- Serve potatoes and potato substitutes; AVOID the "extras," such as butter, sour cream, and gravy; these are what actually contain the calories
- Serve fresh raw vegetables and fruits often
- Use low-calorie dressings
- Season with salt, pepper, herbs, and spices; AVOID butter, bacon fat, or sauces as seasonings
- Serve bread at either lunch or dinner, but not at both
- Serve low-calorie desserts, such as sherbet, plain yogurt mixed with unsweetened fruit, plain gelatin, unfrosted cake, or plain cake doughnut
- Serve unsweetened, low calorie, or low fat beverages

NUTRITION

Since SS personnel are responsible for providing nutritionally balanced meals, it is essential to have a basic knowledge of WHAT FOODS contain each nutrient and HOW MUCH of each is required each day. We are not, however, going to concern you with the aspects of nutrition which rightly are the responsibilities of a dietitian. If you desire an analysis to be made on your menus, most Naval hospitals have qualified resident dietitians who can perform this task for you. In addition to the information you read in this reading assignment under "The Daily Food Guide," you should note the following facts.

The five basic nutrients are:

- Proteins
- Fats
- Carbohydrates
- Vitamins
- Minerals

PROTEINS

Proteins are the most important nutritive elements required by the body. They help build new tissues and repair old tissues. They also provide fuel for body warmth and energy, but this is not their main function. Certain proteins help develop resistance to disease. Good sources of protein are:

Milk
Meats
Fish
Eggs
Legumes (kidney beans, lima beans, lentils, peanuts)
Cereals
Vegetables

FATS/CARBOHYDRATES

Fats and carbohydrates are often grouped together because they are the body's primary source of energy. They also provide fuel for warmth. Foods providing fats are:

Butter
Milk
Cream
Meat fats
Egg yolks
Vegetable oil
Shortening

Carbohydrates are the most easily digested of the nutrients, are the least expensive, and are the most readily available. Good sources of carbohydrates are:

Cereals
Cereal products
Starchy vegetables
Sugars
Fruits

VITAMINS

Vitamins are essential for growth and good health. Each one performs a special function in the body. Though they supply no heat or energy to the body and contain no body-building elements, they are indispensable to good health and normal body functions. They also help protect the body against infection.

Since some vitamins are not stored in the body,they must be replenished each day. This is another reason why a balanced meal is so important. Care must be taken when you cook foods in water because some vitamins will cook out. It is always a good idea to use this water for stews, soups, or sauces. This way you do not lose these valuable vitamins.

Vitamin B_1 (Thiamin)

Good sources of thiamin are:

Lean meat (particularly pork)
Liver
Whole-grain breads and cereals
Enriched breads and cereals
Legumes
Peanuts
Milk

Vitamin B_2 (Riboflavin)

Good sources of riboflavin are:

Milk
Liver
Leafy green vegetables
Whole-grain breads and cereals
Enriched breads and cereals

Niacin

The best sources of niacin are:

Liver
Peanut butter

Vitamin C

Vitamin C is also known as ascorbic acid. This is one of the vitamins which must be included in the diet each day. Citrus fruits are all excellent sources of this vitamin. Other good sources are:

Tomatoes
Cantaloupes
Raw green foods
Fresh strawberries
Potatoes (if cooked in their skins)

Vitamin A

Good sources of vitamin A are:

Milk
Butter
Cream
Cheese
Liver
Fish liver oils
Yellow fruits and vegetables
Leafy green vegetables
Egg yolks

Vitamin D

Vitamin D is known as the "sunshine vitamin" because direct rays of the sun change a certain substance in the skin to vitamin D.

Though vitamin D is not found in many natural foods in significant amounts, rich sources are:

Fish liver oils
Salmon
Mackeral
Tuna
Sardines
Beef liver
Eggs
Butter
Cream

Vitamin E

This vitamin is found in:

Meat
Milk
Butter
Grains
Vegetables

Vitamin K

This vitamin is a contributing factor to the clotting of blood. Leafy vegetables are good sources of this vitamin.

MINERALS

It is believed that minerals must be present in the body in order for vitamins to perform their functions. We are going to introduce you only to five of the more important ones.

Calcium

Calcium is the builder of bones and teeth. It also aids in clotting blood and is necessary for normal muscle contraction. Milk is the best source of calcium. Other sources are:

Cheese
Clams
Cauliflower
Mustard greens
Turnip greens

Phosphorus

This mineral is also necessary for building bones and teeth. Good sources of phosphorus are:

Milk
Cheese
Eggs
Meat
Legumes
Nuts
Whole grain cereals
Vegetables

Iron

Iron is a component of the bones and of hemoglobin (a part of the blood). The best source of iron is liver. Other good sources are:

Lean meats
Egg yolks
Dried legumes
Green leafy vegetables
Enriched breads and cereals
Molases

Iodine

Seafoods are especially rich in this mineral. Iodine is also contained in iodized salt (this is the kind procured by the Coast Guard). Ordinary salt intake generally furnishes all the iodine an individual needs.

Salt

Salt is needed by everyone. A person needs about one level teaspoon of salt per day and more when he perspires a great deal. The average intake of salt, through normal food sources, is two or three teaspoons daily. This is enough for a person drinking up to about four quarts of water. A person who is not getting enough salt may become weak. It must be remembered, however, that there are certain physical problems which may necessitate a salt-free diet for some individuals.

ADDITIONAL HEALTH NEEDS

There are other substances which play a vital part in good health, but which cannot accurately be classed as nutrients. Three of these are (1) calories, (2)water (fluid), and (3) cellulose (bulk).

Calories

Though not actually classed as nutrients, calories always seem to have a way of entering any discussion on food and nutrition. A calorie is simply a unit used to measure the energy which is produced by food. Almost all foods contain some calories. Some foods are high calorie foods; others are low calorie foods. About half of the calories which an individual consumes comes from carbohydrates.

Individual caloric needs vary greatly. These needs depend upon climate, a person's sex, weight, age, and amount of activity. If an individual does not consume enough calories, a weight loss will result. Consumption of too many calories causes a weight gain. Numerous calorie charts are available if an individual wishes to keep track of his caloric intake. There is no need for you as an SS to memorize the number of calories present in each food; if special low-calorie or high-calorie menus are needed, calorie charts can be used. For normal menu planning, proper use of the Daily Food Guide should supply adequate numbers of calories.

Water (Fluid)

Water is not a food, but it can be far more important. About three-fourths of the body is made up of water. Much of this water is lost through normal body functions and must be replaced frequently. The average adult needs about two and one-half quarts of water daily. If an individual works hard or if the weather is hot, this need is five to twelve quarts daily. Dehydration (water loss) can often result in death.

Many foods contain a high water content. This is one means by which we take fluid into our bodies. The remainder of the fluid requirement must be drunk. Any liquid drink will fulfill this fluid need. Generally, thirst alerts us to the fact that we need fluid.

Cellulose (Bulk)

Bulk is needed as an aid to the digestion process. It is also necessary for helping the body waste system. Bulk is supplied by vegetables, fruits, and some cereals. If these foods are consumed in the recommended amounts, the body will get the bulk it needs to function properly.

CONSERVING NUTRIENTS

It is not enough just to select proper foods for the menu. You must prepare them in such a way that valuable nutrients are not lost.

The following cooking rules will, if followed, make your meals more nutritious and add to the general health of the crew.

- Serve fresh fruits and vegetables as soon after you receive them as possible.
- Handle fresh fruits and vegetables carefully, because bruising causes a rapid loss of vitamins.
- Store fresh fruits and vegetables properly until they are used.
- Do not soak vegetables in water longer than necessary to freshen or clean them; water will dissolve vitamins B_1, B_2, C, and minerals.
- To cook vegetables, place them in rapidly boiling water, bring the water back to a boil, and reduce to a simmer.
- Cook vegetables quickly and just until tender in order to leave them with some of their original crispness.
- Cook vegetables in as little water as possible.
- Don't throw away cooking water; save it for use in sauces, gravies, and soups.
- Heat canned vegetables quickly just before serving.

- Shred outer leaves of lettuce, cabbage, and green leaves of celery for use in flavoring soups.
- Serve fruits and vegetables raw in salads.
- Prepare fruits and vegetables for salads just before serving.
- When salmon salad is prepared, save the juice and use it in salad dressing or as part of the liquid for salmon loaf or sauce.
- Prepare hot foods just in time to be served; never prepare them early and reheat them.

CHECK-UP TIME

From the information provided, you can readily see that menus can be prepared for only one meal, for an entire day, or for several weeks in advance. Regardless of how many menus you prepare at one time, remember that *menu plans are an orderly and systematic way to provide nutritious meals and to meet the requirements of the Coast Guard food service program.*

After drafting your menu(s), utilizing all the preceding guidelines and samples, use the following checklist:

(1) Did you use authorized and available food items?

(2) Did you include the proper amounts of foods from each of the Basic Four Food Groups?

(3) Can you properly prepare the items using the equipment in your particular dining facility?

(4) Do you have an adequate number of SS personnel to accomplish the tasks necessary to prepare each meal?

(5) Can all the foods be ready at the right time?

(6) Do you need to allow for any last minute food preparation?

(7) Does any menu contain items which require cooking at different oven temperatures at different times?

(8) Is there contrast in color, flavor, and texture?

(9) Is there sufficient variation from previous menus to avoid monotony?

If your menu(s) meet all the necessary requirements, you are ready to proceed.

SUBMITTING AND POSTING THE MENU

After you have drafted your menu, it should be neatly typed on NAVSUP Form 1080. You must be sure to include the AFRS card number directly after each item on the menu. You must submit this form to the food service officer (FSO). He will analyze it for (1) nutritional adequacy, (2)variety, (3) contrast, (4) seasonal and climatic considerations, (5) availability of equipment and personnel, (6) status of stock balances, and (7) comparison of the estimated menu cost against the expected operating allowance. Though submission deadlines for menus vary from one command to another, you should normally submit them by the middle of the week preceding the week you plan to use them.

After the menu has been signed by the FSO, it is forwarded to the commanding officer for his approval and signature. The commanding officer's approval of the menu constitutes authority to make the required issues of food to the enlisted dining facility (EDF) for the week.

The commanding officer may grant written permission to the FSO to make necessary changes in approved menus to meet emergencies which might arise. When this permission is granted on a blanket basic, the FSO should report all significant changes and the reason for making the change to the commanding officer.

With the commanding officer's approval, your menu is ready to be posted. You should always post the menu where it can easily be seen. Use descriptive words on the menu you post. This will make your meal more inviting.

EXAMPLES:

Buttered fresh corn on the cob
Smokey barbecued beef ribs
Beef teriyaki with curried rice

Remember, however, to always prepare the food just as you have billed it. Also, be sure that those SS

personnel on the serving line KNOW what they are serving. They should know, for instance, that curry is what makes the rice yellow; that giblets instead of mushrooms are in the gravy; that celery seeds are the "little dark things" in the potato salad, etc.

If you carefully follow the procedures outlined in this reading assignment, you should produce meals which will not only satisfy the nutritional needs of your co-workers, but will also satisfy their palates and help boost morale!

SELF-QUIZ #1

PLEASE NOTE: Many students study ONLY the self-quizzes and pamphlet review quiz, thinking that this will be enough to pass the End-of-Course Test. THIS IS NOT TRUE. The End-of-Course Test is based on the stated objectives. To pass the EOCT, you must study all the course material.

1. Why should all menus be planned? _____
2. What is one of the primary reasons you should have variety in your menus? _____
3. What form should you use as a preliminary step in your menu planning process? _____
4. What is the difference between a standard menu and a cycle menu? _____
5. We have listed ten guides you can use when you plan menus. List eight of them.

   A. _____ E. _____
   B. _____ F. _____
   C. _____ G. _____
   D. _____ H. _____

6. Using the Basic Four helps you plan the _____ balance of your meal.
7. Draw a line from the food in Column A to the appropriate food group in Column B.

A	B
Peanut butter	MILK
Cheese	MEAT
Spaghetti	VEGETABLE/FRUIT
Grapefruit juice	BREAD/CEREAL
Crackers	
Dry beans	
Eggs	
Cottage cheese	

8. On the line provided, state the MINIMUM number of daily servings an individual needs from each of the Basic Four.

   Milk _____
   Meat _____
   Vegetable/Fruit _____
   Bread/Cereal _____

41

SELF-QUIZ #1 *(Continued)*

9. What are three ways you can determine the food preferences of those you serve?

   A. _____
   B. _____
   C. _____

10. If 160 portions of spareribs were served at a meal attended by 332 people, what would the acceptance factor be? (Show all work)

11. What is the BEST predictor for meal attendance? _____

12. Why are food consumption records valuable tools for the menu planner? _____

13. The primary RESTRICTING factor in menu planning is _____.

14. Draw a line from the meal component in Column A to its identifying characteristic in Column B.

A	B
ENTREE	Should complement the main dish
VEGETABLE	Enhances the menu
SALAD	Determines what other foods are to be served
DESSERT	Is least expensive part of the meal to prepare
APPETIZER/SOUP	Consumes most time in preparation
BEVERAGE	Increases variety and nutritional content of the meal

15. If you plan to serve creamed beef at breakfast, should you also plan to serve another meat? _____
    If so, how many others? _____

SELF-QUIZ #1 ***(Continued)***

16. When preparing an ala carte breakfast menu, what items must you include in addition to those items listed on the cycle menu?

A. _____ E. _____
B. _____ F. _____
C. _____ G. _____
D. _____

17. When planning noon and evening meals, what is the MINIMUM number of salads you should offer? _____ How many entrees? _____

18. On a short order menu, what is the MINIMUM number of specialty items you should offer? _____

19. Menus which are designed to appeal to a particular cultural group are called _____ menus.

20. Several considerations were provided for cutting calories when you prepare foods. List five of them.

A. _____
B. _____
C. _____
D. _____
E. _____

21. When planning menus, what common error should you avoid when using ethnic meals? _____
_____

22. What common menu error is often made concerning gumbo? _____

23. Draw a line from each nutrient in Column A to the appropriate value in Column B.

A	B
PROTEINS	Provide primary source of energy
FATS	Are the most easily digested of all nutrients
CARBOHYDRATES	Are essential for proper assimilation of other nutrients
VITAMINS	Build new body tissues
MINERALS	Help protect the body against infection

24. Draw a line from the vitamins in Column A to good sources for each in Column B.

A	B
B_1 (Thiamin)	Sun
B_2 (Riboflavin)	Citrus fruits
C	Egg yolks
A	Leafy green vegetables
D	Grains
E	Lean pork

43

SELF-QUIZ # 1 ***(Continued)***

25. The best food source for iron is _____.
26. Though not a nutrient, a _____ measures the energy which is produced by food.
27. Why must you consider calories in your menu planning? _____
28. Why is liquid essential in the diet? _____
29. What is the function of bulk in the diet? _____
30. In order to conserve nutrients, what should you do with cooking water? _____
31. On what form should you type your drafted menu? _____
32. Who must approve a submitted menu?

    A. _____
    B. _____

ANSWERS TO SELF-QUIZ #1

Following are the correct answers and references pages. To be sure you understand the answers to those questions you missed, you should restudy the referenced portions of the text.

1. All menus must be planned in order to always come up with meals that ***offer variety, are not monotonous, but are nutritious.*** (Page 1-3)

2. One of the primary reasons you should have variety in your menus is that ***you need to include all nutrients in the proper amounts.*** A secondary reason is so that your meals will not be monotonous. (Page 1-3)

3. You should prepare a ***Menu Draft (NAVSUP-1092)*** as a preliminary step in your menu planning process. (Page 1-3)

4. ***A standard menu is designed for a specific time; a cycle menu is actually a series of standard menus which are designed to be used over and over again.*** (Page 1-3)

5. You should list eight of the following ten guides you may use as you plan menus.

   A. Daily Food Guide
   B. Food Preference Ratings
   C. Food Acceptance Records
   D. Meal Attendance Records
   E. Food Usage Records
   F. Index of Recipes
   G. Requirements Tables
   H. Availability of foods
   I. Climatic conditions
   J. Equipment and Personnel (Pages 1-12 - 1-16)

6. Using the Basic Four helps you plan the ***nutritional*** balance of your meals. (Page 1-12)

7. Cheese - Milk
   Cottage cheese

   Peanut butter - Meat
   Dry beans
   Eggs

   Grapefruit juice - Vegetable/Fruit

   Spaghetti - Bread/Cereal (Pages 1-12 - 1-13)
   Crackers

8. Milk - 2
   Meat - 2
   Vegetable/Fruit - 4
   Bread/Cereal - 4 (Pages 1-12 -1-13)

9. You can determine the food preferences of those you serve by:

   A. Keeping a record of those foods which are selected most frequently from the serving line.
   B. Checking the trays at the scullery for waste.
   C. Using a food preference questionnaire. (Page 1-15)

45

ANSWERS TO SELF-QUIZ #1 *(Continued)*

10. If 160 portions of spareribs are served at a meal attended by 332 people, the acceptance factor is computed as follows:

$$\frac{160}{332} = .48$$

$$\begin{array}{r} .48 \\ 332\overline{)\,160.00} \\ \underline{132\ 8} \\ 27\ 20 \\ \underline{26\ 56} \\ 64 \end{array}$$

(Page 1-15)

11. The BEST predictor for meal attendance is ***a head count at the door.*** (Page 1-15)

12. Food consumption records are valuable tools for the menu planner because ***they indicate how often certain foods are being served.*** (Page 1-15)

13. ***Cost*** is the primary restricting factor in menu planning. (Page 1-16)

14. Entree - Determines what other foods are to be served

    Vegetable - Should complement the main dish

    Salad - Increases variety and nutritional content of the meal

    Dessert - Consumes most time in preparation

    Appetizer/Soup - Is least expensive part of the meal to prepare

    Beverage - Enhances the menu (Pages 1-16 - 1-17)

15. If you plan to serve creamed beef at breakfast, ***you should also plan to serve another meat item.*** (Page 1-17)

16. When preparing an ala carte breakfast menu, in addition to those items listed on the cycle menu, you must also include:

    A. Ready-to-eat cereal
    B. Fresh milk
    C. Eggs
    D. Bread
    E. Butter
    F. Coffee
    G. Sugar (Page 1-17)

17. When planning noon and evening meals, you should offer a MINIMUM of *two* salads; *two* entrees should also be offered. (Page 1-20)

18. On a short order menu, you should offer a MINIMUM of *one* specialty item. (Page 1-20)

19. ***Ethnic*** menus are those designed to appeal to a specific cultural group. (Page 1-22)

ANSWERS TO SELF-QUIZ #1 *(Continued)*

20. You should list five of the following suggestions for preparing low-calorie foods:

    A. Use unsweetened fruits and juices
    B. Decrease portion sizes
    C. Broil, poach, bake, or scramble instead of frying
    D. Use sugar substitutes
    E. Trim all excess fat from meats
    F. Use bouillon or broth instead of creamed soups
    G. Serve potatoes and potato substitutes without "extras"
    H. Serve fresh raw vegetables and fruits often
    I. Use low-calorie dressings
    J. Avoid butter, bacon fat, or sauces as seasonings
    K. Do not serve bread at both lunch and dinner
    L. Serve low-calorie desserts
    M. Serve low-calorie beverages (Page 1-28)

21. ***Noon and evening meals of the same day should NOT BOTH feature ethnic menus*** unless an alternate entree is provided. (Page 1-5)

22. ***Gumbo is often erroneously listed as a soup.*** (Page 1-5)

23. Proteins - Build new body tissues

    Fats - Provide primary source of energy
    Carbohydrates

    Carbohydrates - Are the most easily digested of all nutrients

    Vitamins - Help protect the body against infection

    Minerals - Are essential for proper assimilation of other nutrients (Pages 1-27 - 1-28)

24. B_1 - Lean pork
    B_2 - Leafy green vegetables
    C - Citrus fruits
    A - Leafy green vegetables
    Egg yolks
    D - Sun
    E - Grains (Pages 1-27 - 1-28)

25. ***Liver*** is the best food source for iron. (Page 1-28)

26. ***Calories*** measure the energy produced by food. (Page 1-29)

27. Calories must be considered in your menu planning because consumption of too many calories contributes to weight gain; too few calories will cause a weight loss. There must be a balance of these in the diet. (Page 1-29)

ANSWERS TO SELF-QUIZ #1 *(Continued)*

28. Liquid is essential in the diet because 3/4 of the body is composed of water, and lack of water in the diet can cause dehydration. Also, much water is lost through normal body functions and must be replaced. (Page 1-29)

29. Bulk is needed for proper digestion and waste disposal in the body. (Page 1-29)

30. Cooking water should be ***saved for use in sauces, gravies, and soups.*** (Page 1-29)

31. You should type your drafted menu on ***NAVSUP Form 1080.*** (Page 1-30)

32. Each menu must be approved by the food service officer (FSO) and the commanding officer. (Page 1-30)

READING ASSIGNMENT #2

Pages 2-3 through 2-11

"Standards/Menu Costing"

OBJECTIVES

After completing this assignment, you should be able to:

1. Explain why "standards" are necessary in food service.
2. Define "standard recipe."
3. Define "yield."
4. Define "standard portion."
5. Explain how "standards" figure into costing menu items.
6. State the purposes for costing menus.
7. State the two primary sources of information for completing a cost worksheet.
8. Explain how to compute the total cost for preparing a given recipe.
9. Explain how to compute the cost per portion on a given recipe.

STANDARDS/MENU COSTING

INTRODUCTION

As you learned in the first reading assignment, cost is one of the major restrictions imposed on the menu planner. Costing, however, is simplified in the Coast Guard through the use of certain "standards."

USING STANDARDS IN FOOD SERVICE

Efficient food service personnel cook and bake with *standard* recipes. From these *standard* recipes, they get *standard* yields. They serve *standard* portions in a style called a *standard* dish-up. The meaning of these words is very simple and the whole idea of using *standards* is just using common sense.

STANDARD RECIPE

A standard recipe is a written formula (recipe) for producing a food item of a certain amount and quality; that is, you use exactly the same amount of ingredients and prepare the food in exactly the same way each time. If you also use ingredients that are similar in quality each time, then you will continually get the same results.

If your SS's use a standard recipe for beef stew, no matter which SS is on duty and prepares and cooks the beef stew, you will always get the same amount of beef stew, and it will always taste the same.

STANDARD YIELD

The word "yield" means the actual amount of servable food you get from a standard recipe.

For example, if you have a 20 pound raw (as purchased) turkey, you may have only 12 pounds of actual turkey meat (yield) to serve after shrinkage from cooking and after all the waste is removed.

If a standard recipe is followed every time, you should come out with a standard yield; that is, the same amount or weight of servable food every time.

STANDARD PORTION

Standard portions simply means serving the same amount of any particular item on the menu to each patron.

The standard portions served on a turkey dinner consist of exactly:

4 oz. turkey slices
2/3 cp. potato
1/2 cp. dressing
2 oz. cranberries

By using a standard recipe, knowing the standard yield to expect from it, and serving the standard portions shown above, the dining facility knows exactly how much it costs to prepare and serve the turkey dinner.

Also, one quick way to make a patron angry is to have him see another patron in the dining facility get a larger serving than he.

STANDARD DISH-UP

Standard dish-up is a very simple idea, but it is very important. It means putting the food on the plate in the same pattern or arrangement each time.

In the case of a turkey dinner, the watch captain might order the SS's to put the turkey slices on the left side of the plate, the dressing on top of the turkey, the potatoes in the middle, the cranberries on the right side, and a sprig of parsley on the top side.

He knows that this makes the plate look attractive, and he knows that people enjoy a meal much more if it is attractively served with the right combination of placement, quantity, and color on the plate.

STANDARD PROCEDURES

Standard procedures are followed in all well-run businesses. This includes dining facilities. A standard procedure simply means that workers use the same routine for doing a job each time it's done.

Different ways of lining up ingredients for sandwiches, preparing hot food recipes, setting up tables, etc. are tried until the best method is found. This method then becomes a standard procedure, and all personnel do it this way.

ARE STANDARDS NECESSARY?

All of the standards explained above are designed to eliminate human errors. The patrons do not have

50

to depend on the judgment or the mood of different SS's each day to get a good bowl of soup or a proper portion of meat. Standards guarantee the same results every time!

COSTING STANDARD RECIPES

When a recipe is being standardized for use in a particular dining faility, the COST of all the ingredients that go into the recipe is totaled up, and a per-unit cost is figured out. That is, if the recipe yields (makes) 100 portions of French Toast, the cost of all the ingredients needed to make these 100 portions is added up to get the total cost of the recipe. That total cost is then divided by 100 to find the unit cost (the cost of one portion of French Toast).

Knowing the exact per-unit cost of a food item helps the subsistence specialist decide how much each portion costs.

Purchase prices of ingredients change from time to time, so it is necessary to keep an eye on them and refigure the per-unit cost as these changes occur.

PROCEDURES

Costing menus has a two-fold purpose. You want to determine (1) the TOTAL cost for preparing the recipe and (2) the cost per individual portion.

For purposes of costing, NOTE the following TERMS:

Quantity - Amount of an ingredient required to prepare a given recipe. This quantity is shown as weights/ measures on the recipe card.

Unit price - Most recent price paid for an item, rounded to the nearest whole cent.

Unit - The "unit" as shown on the Provision Ledger (CG-4246) is the same as "unit of issue." If an item is purchased "per pound," the unit is "lb;" if it is purchased "per bag," the unit is "Bg;" etc. On the recipe card, the unit is shown under "Weights" or "Measures."

Cost - The cost on your sample worksheet is the TOTAL cost for an individual ingredient in a given recipe.

To cost a menu, you use two basic sources for recording information on your cost worksheet (Illustration 2-3): (1) the AFRS card (see Illustration 2-1) and (2) the Provision Ledger (CG-4246) (see Illustration 2-2). NOTE: Illustration 2-2 shows only the upper right-hand corners of three different CG-4246's.

On your worksheet, you record:

- The ingredients as listed on the recipe card
- The quantity - taken from the "Weights" or "Measures" columns of the recipe card. NOTE: In CG dining facilities, you usually use weights for more accurate results.
- The unit listed in the "Weights" or "Measures" columns of the recipe card.

At this point, you need to COMPARE the "Unit" provided on the Provision Ledger with the "Unit" on the recipe card. IF THEY ARE THE SAME (as is bread in the following illustrations), you proceed with the worksheet as follows:

- Record the unit price from the Provision Ledger
- Multiply the quantity by the unit price to obtain the cost per item

FRENCH TOAST

YIELD: 100 Portions — EACH PORTION: 2 Slices

TEMPERATURE: 375° F. Griddle

INGREDIENTS	WEIGHTS	MEASURES		METHOD
Milk, nonfat, dry Salt Sugar, granulated	8 oz 1 oz 1 lb 8 oz	1¾ cups 1½ tbsp 3½ cups		1. Combine milk, salt and sugar; blend well.
Eggs, whole, slightly beaten	12 lb 8 oz	6¼ qt (125 eggs)		2. Add dry ingredients to eggs; whip.
Water		2¼ qt		3. Add water and mix well.
Bread, dry, sliced Shortening, melted	12 lb 2 lb	200 slices 1 qt		4. Dip bread in egg mixture to coat both sides.
INGREDIENTS	WEIGHTS	MEASURES		METHOD
				5. Place on well greased griddle; fry on one side until golden brown. Turn; fry on other side until golden brown. 6. Serve immediately.

Illustration 2-1: AFRS Card

STOCK NUMBER		ARTICLE
8910-00-285-1722		Milk, nonfat, dry
PACKAGING DATA: 6 5-lb. cans	UNIT: cn.	UNIT PRICE: $4.63

STOCK NUMBER		ARTICLE
8950-00-262-8886		Salt, table
PACKAGING DATA: 12 5-lb. bags	UNIT: lb	UNIT PRICE: $.12

STOCK NUMBER		ARTICLE
8920-00-753-5776		Bread, white, sliced
PACKAGING DATA: As needed	UNIT: lb.	UNIT PRICE: $.40

Illustration 2-2: Sample From Three Provision Ledgers (CG-4246)

COST CALCULATION WORKSHEET	RECIPE NAME & CARD NUMBER:			
INGREDIENTS / ITEMS	**UNIT**	**QUANTITY**	**UNIT PRICE**	**COST**
Milk, nonfat, dry	oz	8	.0578	.4624
Salt	oz	1	.0075	.0075
Sugar, granulated				
Eggs, whole				
Water	qt	2 1/4	N/C	N/C
Bread, dry, sliced	lb	12	.40	4.80
Shortening				
			TOTAL:	
COST PER PORTION:				

Illustration 2-3: Sample Cost Calculation Worksheet

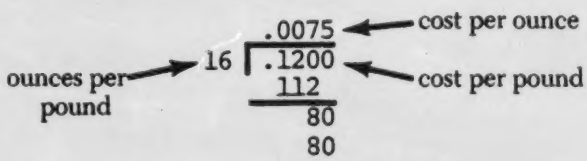
IF THE UNITS ARE NOT THE SAME, you proceed with the worksheet as follows:

- Compute and record the unit price

MATH NOTES:

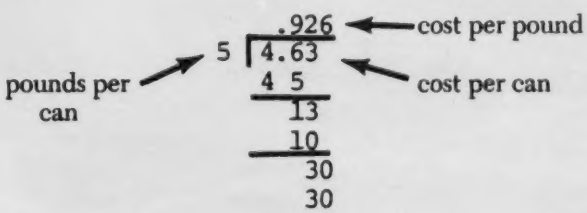
If your recipe calls for 1 oz. of salt, and your Provision Ledger prices salt at $.12 per lb., you must find out how much an ounce of salt costs.

Since there are 16 ounces in a pound, you divide your cost per pound by 16:

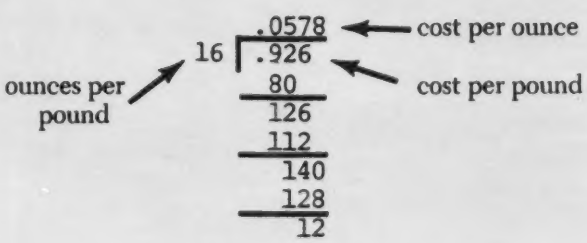


If your recipe calls for 8 oz. of nonfat, dry milk, and your Provision Ledger prices milk at $4.63 per 5-lb. can, you must find out: FIRST, how much a pound of milk costs; THEN, how much an ounce of milk costs.

Since there are 5 lbs. of milk in a can, you divide your unit price by 5 to find out how much a pound costs:



NOW -- Since there are 16 ounces in a pound, you divide your cost per pound by 16:



54

- Multiply the quantity by the computed unit price to obtain the cost per item

EXAMPLES:

For salt, you have only 1 oz., so the cost is $.0075.

For milk, you have 8 oz., so you multiply $.0578 by 8.

$.0578 ← Cost per ounce
X 8 ← Number of ounces
$.4624 ← Total cost to record on worksheet

Now that we have shown you the procedures for obtaining total cost per item, let's see how well you can do on completing the cost worksheet in Illustration 2-3. Use the following space for your computations. You will need this information from the Provision Ledgers:

SUGAR:	Packaging Data:	6 10-lb. bags
	Unit:	bg.
	Price:	$2.96 per bg.
EGGS:	Packaging Data:	30 dz. per case
	Unit:	dz.
	Price:	$.64 per dz.
SHORTENING:		
	Packaging Data:	6 5 1/2-lb. cans per case
	Unit:	cn.
	Price:	$2.75 per cn.

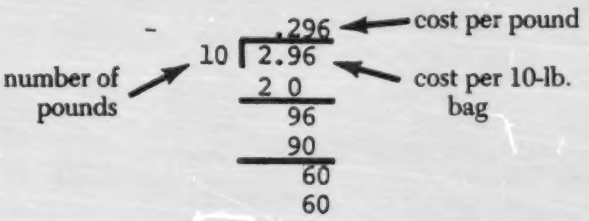
60

Each item should be computed and recorded on the worksheet as follows:

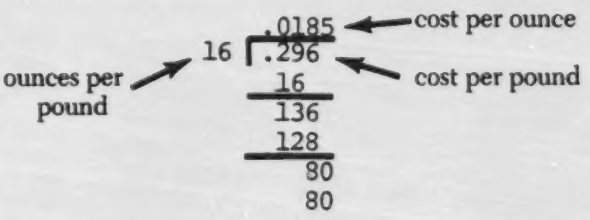
SUGAR:	Unit:	oz.
	Quantity:	24
	Unit Price:	$.0185
	Cost:	$.444

RATIONALE: We converted 1 lb. 8 oz. to 24 ounces so we would not have to deal with fractions of a pound.

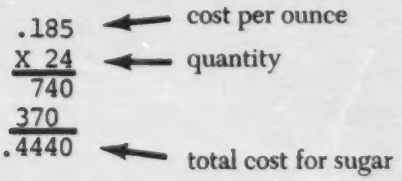
Since the Provision Ledger indicates that a 10-lb. bag of sugar costs $2.96, we must: FIRST, compute the cost per pound as follows:



Again -- To obtain cost per ounce, you divide your cost per pound by 16 since there are 16 ounces in a pound:

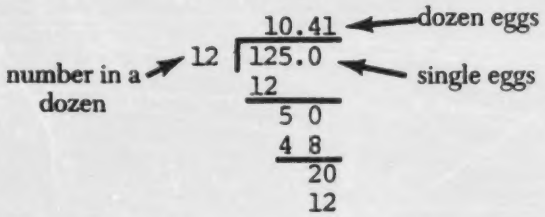


Then, you multiply this cost per ounce by your quantity of 24:

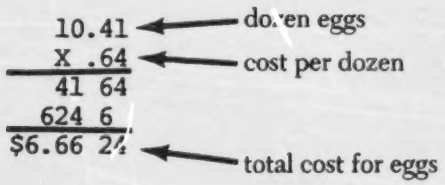


EGGS:	Unit:	dz.
	Quantity:	10.41 dz.
	Unit Price:	$.64 per dz.
	Cost:	$6.66

RATIONALE: Since the recipe card calls for 125 eggs, and the price is per dozen, you need to find out how many dozen you have in 125 eggs. Since there are 12 in a dozen, you divide 125 by 12:

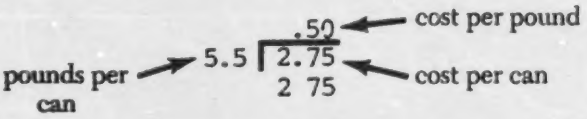


To find out the total cost for eggs, you multiply the number of dozen eggs you have by the cost per dozen:



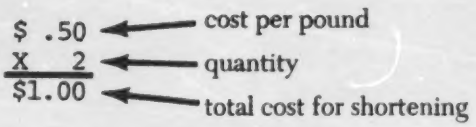
SHORTENING:		
	Unit:	lb.
	Quantity:	2
	Unit Price:	$.50 per pound
	Cost:	$1.00

RATIONALE: Since the Provision Ledger tells us that a 5 1/2-lb. can costs $2.75, we need to find out the cost per pound by dividing 5 1/2 (5.5) into $2.75:



NOTE: Don't forget to move the decimal point over as shown.

To obtain the total cost for shortening, we then mutiply the cost per pound by the quantity:



Notice there is no charge (N/C) for water.

Now that all the hard work is accomplished, you simply add all your total costs of individual items to obtain the total cost for the recipe:

```
$  .4624
    .0075
    .444
   6.66
   4.80
   1.00
$13.3739 = $13.37  <-- total cost of recipe
```

round-off to nearest whole cent here

Since this recipe provides 100 portions, to determine the cost per portion, you divide the total cost of your recipe by 100:

```
      .1337 = $.13  <-- cost per portion (round-off to nearest whole cent)
100 ⟌ 13.37
    10 0
     3 37
     3 00
      370
      300
       700
       700
```

NOTE: If you have access to an FSC Group 89, the price per pound for many items is already figured for you.

If you found this reading assignment difficult, we suggest that you re-read it, working each computation yourself. It might also be beneficial for you to review portions of any basic math text to refresh your memory on some of the principles involved in accurately costing a menu.

SELF-QUIZ #2

1. Match the terms in Column A with the definitions in Column B.

A	B
STANDARD RECIPE	The actual amount of servable food you get from a standard formula
STANDARD YIELD	A written formula for producing a food item of a certain amount and quality
STANDARD PORTION	Serving the same amount of any particular item to each patron

2. Why are "standards" necessary in menu planning? _____

3. Why do you need "standards" to cost a menu? _____

4. What two questions do you want to answer when you cost a recipe?

   A. _____
   B. _____

5. The two primary information sources for completing a cost worksheet are:

   A. _____
   B. _____

SELF-QUIZ #2 *(Continued)*

6. Given the following recipes and information from the Provision Ledgers, complete the sample cost worksheets:

RECIPE #1

GRILLED CHEESE SANDWICH N. SANDWICHES No. 6(2)

YIELD: 100 Portions				EACH PORTION: 1 Sandwich
				TEMPERATURE: 400° F. Griddle
INGREDIENTS	WEIGHTS	MEASURES		METHOD
Cheese, sliced	12 lb 8 oz.	200 slices	.....	1. Place 2 slices cheese between 2 slices bread.
Bread	12 lb	200 slices	.....	
Butter or margarine, melted	2 lb	1 qt	.....	2. Brush top and bottom of sandwiches with butter or margarine. 3. Grill each sandwich until bread is golden brown on each side and cheese is melted.

Provision Ledger Information:

Cheese — Unit: lb.
Unit Price: $1.37 per lb.

Bread — Unit: lb.
Unit Price: $.43 per lb.

Butter — Unit: lb.
Unit Price: $1.51 per lb.

COST CALCULATION WORKSHEET	RECIPE NAME & CARD NUMBER:			
INGREDIENTS / ITEMS	UNIT	QUANTITY	UNIT PRICE	COST
			TOTAL:	
COST PER PORTION:				

SELF-QUIZ #2 *(Continued)*

RECIPE #2

L. MEAT, FISH AND POULTRY No. 65(2)

BAKED CANNED HAM

YIELD: 100 Portions				EACH PORTION: 2 Slices (4 Ounces)
PAN SIZE: 18 by 24-inch Roasting Pan				TEMPERATURE: 325° F. Oven
INGREDIENTS	WEIGHTS	MEASURES		METHOD
Ham, canned, whole	30 lb			1. Place hams, fat side up, in pans.
Cloves, whole	1 oz	5 tbsp		2. Stick cloves into ham, about 1 inch apart.
Sugar, brown Vinegar	3 lb	2 qt 1½ qt		3. Mix sugar and vinegar. Pour over hams. 4. Insert meat thermometer into center of a ham. 5. Bake uncovered 2½ to 3 hours or until meat thermometer registers 140° F. 6. Let stand 20 minutes before slicing.

Provision Ledger Information:

Ham — Unit: lb.
Unit Price: $1.51 per lb.

Cloves — Unit: lb.
Unit Price: $7.66 per lb.

Brown Sugar — Unit: lb.
Unit Price: $.35 per lb.

Vinegar — Packaging Data: 12 32-oz bt.
Unit: bt.
Unit Price: $.37 per bt.

COST CALCULATION WORKSHEET	RECIPE NAME & CARD NUMBER:			
INGREDIENTS / ITEMS	UNIT	QUANTITY	UNIT PRICE	COST
			TOTAL:	
COST PER PORTION:				

61

SELF-QUIZ #2 ***(Continued)***

7. Compute the total cost of each of the two recipes in #6. (Show all math work.)

   Total for Recipe #1 _____
   Total for Recipe #2 _____

8. Compute the cost per portion for each of the recipes in #6. (Show all math work.)

   Recipe #1 _____
   Recipe #2 _____

67

ANSWERS TO SELF-QUIZ #2

1. Standard recipe — A written formula for producing a food item of a certain amount and quality

   Standard yield — The actual amount of servable food you get from a standard formula

   Standard portion — Serving the same amount of any particular item to each patron

   (Page 2-3)

2. "Standards" aid the menu planner because ***the same results are guaranteed each time***. They also ***help when working within certain budgetary confines***. (Page 2-4)

3. In costing menus, "standards" allow the menu planner to figure the exact amounts of food that will be needed to feed a certain number of people and to figure the cost for the preparation. (Page 2-4)

4. The two questions you want to answer when costing a menu are:

   A. What is the total cost to prepare the recipe?

   B. What does each portion cost? (Page 2-4)

5. To complete a cost worksheet, you must have access to the ***recipe card*** and the ***Provision Ledger***. (Page 2-4)

ANSWERS TO SELF-QUIZ #2 ***(Continued)***

6. RECIPE #1

Cheese:
$1.37
X 12.5
685
274
137
$17.125 = $17.13

Bread:
$ .43
X 12
86
43
$5.16

Butter:
$1.51
X 2
$3.02

COST CALCULATION WORKSHEET	RECIPE NAME & CARD NUMBER:			
INGREDIENTS / ITEMS	**UNIT**	**QUANTITY**	**UNIT PRICE**	**COST**
Cheese	lb	12.5	$1.37	$17.13
Bread	lb	12	$.43	$5.16
Butter	lb	2	$1.51	$3.02
			TOTAL:	$25.31
COST PER PORTION: $.25				

ANSWERS TO SELF-QUIZ #2 *(Continued)*

RECIPE #2

Ham:

$ 1.51
X 30
$45.30

Cloves:

.4787 = $.48 ← cost per ounce
16 | 7.66 ← cost per pound
ounces per pound →
6 4
1 26
1 12
140
128
120
112

Sugar:

$ .35
X 3
$1.05

Vinegar:

8 oz = 1 C.
4 C. = 1 qt.
32 oz = 1 qt.

$ .37
X 1.5
185
37
$.555 = $.56

COST CALCULATION WORKSHEET	RECIPE NAME & CARD NUMBER:			
INGREDIENTS / ITEMS	**UNIT**	**QUANTITY**	**UNIT PRICE**	**COST**
Ham	lb	30	$1.51	$45.30
Cloves	oz	1	$.48	$.48
Brown Sugar	lb	3	$1.35	$1.05
Vinegar	qt	1.5	$.37	$.56
			TOTAL:	$47.39
COST PER PORTION: $.47				

(Pages 2-4 -2-10)

65

ANSWERS TO SELF-QUIZ #2 ***(Continued)***

7. The total cost for each of the recipes is:

   Recipe #1 - $25.31

   Recipe #2 - $47.39 (Page 2-11)

8. Each portion in Recipe #1 costs $.25

   Each portion in Recipe #2 costs $.47 (Page 2-11)

READING ASSIGNMENT #3

Pages 3-3 through 3-18

"Custom Foods, Specialty Meals, and Buffets"

OBJECTIVES

After completing this assignment, you should be able to:

1. Define "custom foods."
2. Cite the three main types of custom foods; describe the benefits of using each.
3. Describe the basic reconstitution process for dehydrated vegetables and fruits.
4. Cite two miscellaneous types of custom foods.
5. Explain how a specialty meal differs from a regular meal.
6. Explain why specialty meals should be incorporated into menus.
7. Name the most important component of a specialty meal.
8. Explain why a buffet should begin with a plan.
9. Describe the contents of buffets.
10. Explain how decorations can effectively be used for buffets.
11. Explain how food presentation can enhance buffets.
12. Describe preparation differences for foods which are "self-served" and those which are to be served.
13. Define "canape."
14. Define "hors d'oeuvre."
15. Describe the three basic ingredients for canapes.
16. Cite the five types of buffet items.
17. Explain how fruits can be used to enhance a buffet.
18. Describe the two types of buffet salads.
19. Cite two types of beverages which are good for buffet service.

CUSTOM FOODS, SPECIALTY MEALS, AND BUFFETS

CUSTOM FOODS

"Custom foods" is a general term for the various types of laborsaving and spacesaving processed foods authorized for Coast Guard dining facilities. In the past, these foods where called "ration-dense." Foods so processed greatly extend the subsistence endurance of ships.

There are three main types of custom foods and a miscellaneous category. The basic forms are canned, dehydrated, and frozen.

CANNED

Commercially-canned fruits, vegetables, and juices were the earliest foods used by the Coast Guard. They have long since proved practical for Coast Guard operations in varied environments. They can be safely stored under a wide temperature range, and their use is economical because they are trimmed, peeled, and pitted. In the case of meat, poultry, or fish, there are no bones, skin, or gristle.

The variety of canned foods available for Coast Guard use has greatly increased over the years. The initial list of fruits, vegetables, juices, and soups has expanded to include meats, poultry, fish, entrees, prepared puddings, pie fillings, concentrates, and many other items that simplify logistics and food preparation.

Canned items such as concentrated tomato juice are especially desirable for Coast Guard use. The concentrated product can be diluted and served as a beverage, or it may be used in recipes requiring tomato paste. This product flexibility eliminates the need for stocking two line items.

Canned entrees such as beef stew with vegetables, spaghetti sauce with meat balls, canned beef hash, and roast-beef hash are also authorized for CG use.

DEHYDRATED

Dehydrated vegetables are now widely used in CG dining facilities. Their small weight and volume make them convenient to store. They are easy to prepare; all the precooking tasks associated with raw vegetables have been done for you. They are peeled, diced, sliced, or chopped, and are ready to use. They eliminate waste and ensure portion-control.

The aim in dehydrating is to remove most of the water from the food--sometimes 99 percent of it--without damaging the product. In packaging, desiccation sometimes is used to remove the remaining amount of water from dehydrated foods. A small evelope containing a chemical (activated lime) is put into the final package. It absorbs water from the food during storage. Be sure to discard the desiccant bag.

Dehydrated mashed potatoes and multiuse dehydrated sliced potatoes look and taste so much like fresh potatoes that potato peeling is a vanishing shipboard detail.

Dehydrated sweet potatoes, green beans, peppers, onions, cabbage, egg mix, cream substitute, dessert topping, soups, and American and cottage cheese are important standard staples used by the Coast Guard. They are reconstituted by adding a measured volume of water. The temperature of the water varies (lukewarm or cool) with each specific dehydrated vegetable being reconstituted. Also, the length of time required for the reconstituting process (15 to 30 minutes) varies. Recipes in the Q (vegetable) section of the AFRS give more detailed instructions for reconstituting dehydrated vegetables.

Dehydrated fruits, such as instant applesauce, apple slices, orange, grapefruit, lemon, and pineapple juices, are readily reconstituted by adding a proportionate volume of water to a specified weight of the particular dehydrated fruit. Like the dehydrated vegetables discussed earlier, dehydrated fruits, because of their small weight and volume are convenient to store. Dehydrated fruits may be used for desserts such as pudding, pies, and cakes, or they may be reconstituted and served "as is" at any meals.

FROZEN

Frozen foods contribute much to the increased endurance of Coast Guard ships and the efficient operation of shore bases. Frozen foods routinely stocked are: boneless and prefabricated meats, fish, and poultry; fruits and vegetables; concentrated fruit juices and milk; butter, eggs, and pies. Additional frozen items being authorized for use to reduce manpower are bread dough and precooked entrees, including Swiss steak with gravy, sliced pork loin with gravy, chicken cacciatore, shrimp creole, sliced turkey with gravy, macaroni and cheese, chicken ala king, creamed dried beef, and pork and beef chop suey.

68

MISCELLANEOUS

The miscellaneous category includes many convenient time-saving items that provide end-products of consistent uniform quality. Included are the following bakery mixes: biscuit, bread and roll, cake, cookie, doughnut, muffin, pancake,and sweet dough. This category of custom foods also includes instant dessert-powder puddings, soup and gravy bases, prepared salad dressings, dry icing mix and prepared icing, synthetic vinegar, dessert topping, individual portion packs of condiments, jams, and jellies, and instant oatmeal and farina.

SPECIALTY MEALS

Meals should do more than just satisfy hunger or fulfill nutritional requirements. Meal time should be a time for socializing with shipmates, especially on holidays and special occasions (Coast Guard Day, etc). Meals should be morale builders as well as body builders.

Specialty meals should be planned for special occasions, and these meals should be worthy of the very best creative efforts of the food service personnel.

Recipe names can be changed to fit the occasion. As an example, the dining hall menu board for Lincoln's Birthday could read "Lincoln Log Cake" rather than "Chocolate-Covered Cake Roll." Beginning with January, make a list of the holidays, anniversaries, and special events that fall within each month. (See samples in Illustration 3-1.) Include Ash Wednesday and Good Friday in the list. Although these days are not normally celebrated with festive activities, they are days when one entree should be a meat substitute. These days deserve special attention.

Use your list of special days as a reference when planning the weekly bill of fare.

Meals on these days can be highlighted with one or more special dishes to commemorate the day. Dining halls can be decorated to fit the occasion, and a great deal of festivity can be created with printed menus. (See Illustration 3-2.)

Artistic menus can be planned using foods traditionally associated with the holiday or occasion. Entrees should include the traditional holiday American dishes, or in the case of United Nations Day, as many traditional dishes representing the member countries of the United Nations as possible or practical. The choice of entree is of utmost importance because it is the menu item around which the meal is constructed. Accompaniments to the entree, such as dressings and sauces, also contribute to the occasion.

Traditional color schemes can be used for holidays or other special-occasions to enhance the eye appeal and atmosphere of the meal. Color schemes can be carried out effectively with garnishes, or by the use of paper props and other imaginative devices. Ask for ideas from those around you. Often the people who work with you or for you possess artistic talents and should be encouraged to use them.

JANUARY:	New Year's Day	JUNE	Father's Day
FEBRUARY:	Lincoln's Birthday	JULY:	Independence Day
	Valentine's Day		
	Washington's Birthday	AUGUST:	Coast Guard Day
MARCH:	St. Patrick's Day	SEPTEMBER:	Labor Day
	Ash Wednesday		
	*Easter Sunday	OCTOBER:	Columbus Day
			United Nations Day
APRIL:	*Good Friday		
	*Easter Sunday	NOVEMBER:	Thanksgiving Day
MAY:	Armed Forces Week	DECEMBER:	Christmas Day
	Memorial Day		
	Mother's Day	*May be in either March or April.	

Illustration 3-1

CHRISTMAS DINNER MENU

Vegetable Juice Cocktail B3-1
French Onion Soup P4-1 Crisp Saltines
Savory Roast Turkey L142
Cornbread Dressing O20 Giblet Gravy O16-4
Baked Ham L69
1/ Yellow Rice w/Green and Red Peppers E5-3
Scalloped Sweet Potatoes and Pineapple Q70-2
Seasoned Green Beans QG1
Vegetable Combo (Broccoli, Corn and Carrots) Q80-1
Tossed Green Salad M47 French Dressing M58
Hot Cloverleaf Rolls D34 Cheese Biscuits D1-2
Butter
2/ Vanilla Ice Cream J31 with Crushed Peppermint Topping
Chocolate Cake G9-1 with Lady Baltimore Frosting G48-2
Coffee Tea Milk Soft Drinks

THINK THIN CHRISTMAS DINNER MENU

3/4 cup Vegetable Juice Cocktail
3 oz Savory Roast Turkey
1/2 cup Vegetable Combo
1 cup Tossed Green Salad
Low Calorie French Dressing
1 Cloverleaf Roll
1/2 cup Vanilla Ice Cream (Without Peppermint Candy)
Coffee Tea Milk Low Calorie Soft Drinks

Illustration 3-2

BUFFETS

Buffets introduce a festive dimension to food, whatever the occasion. The versatility of the buffet makes it adaptable to all types of food service occasions in every kind of setting. With practice, you will develop the skills needed to create the many food items that make up a buffet.

Dramatizing an occasion by building a buffet around a colorful theme draws favorable comment from the patrons. Examples of themes are Change of Command, Thanksgiving, Christmas, etc.

Simple buffets can be prepared with little prior experience. Such a buffet can be produced by selecting a limited number of items and perfecting their preparation. Bear in mind that every platter on the buffet table does not have to be a time-consuming centerpiece. You should, however, remember that "eye appeal" is quite often a major element in the success of your buffet.

Every buffet should start with a plan to ensure effective, timely preparation and presentation of all items.

- Put the complete schedule for the buffet on paper.
- Review the entire plan well ahead of time with your fellow workers.
- Post the plan where workers may refer to it, so they can pace their progress to meet the time schedules.

Your plan should list:

- Decorations
- Food to be served
- Sources of recipes for each dish
- Trays, bowls, and platters which are to be used for each particular dish
- Directions for positioning food on the table(s) (See examples of set-ups for buffets tables in Illustration 3-3.)

If at all possible, you should arrange to have two tables for presenting food. On one table you should have the appetizers, salads, breads, relishes, and entrees. The other table should be designed as a dessert table. On it you may have cakes, pastry, cheese, and fruit. If only one table is to be set up, however, you should group together like items or items which complement each other.

NOTE 1: In planning your service table space, you should try to have ten feet of buffet table length for each 60 people you plan to serve.

Note 2: Beverages should not be set up one either one of your basic service tables. If room allows, punch is generally placed at the center of the appetizer table; coffee usually is set up on a small table of its own. Sometimes, punch is placed on the dessert table.

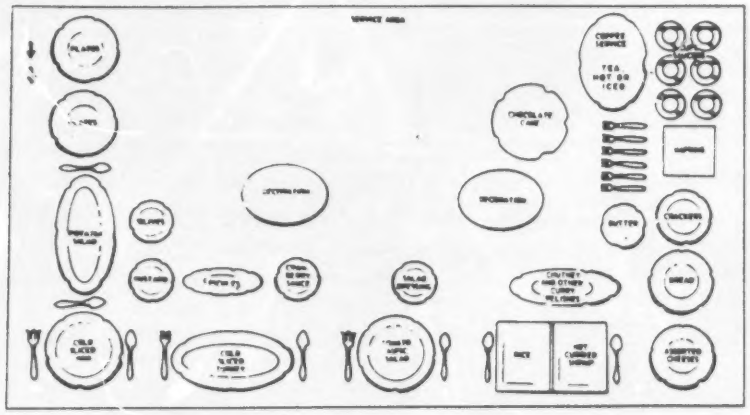


Illustration 3-3.

METHOD OF PRESENTATION is one of the key elements in buffet table preparation. Depending upon the number and kinds of items offered, a buffet can be as elaborate and expensive or as moderate as you want. To enhance your buffet table(s), consider the following:

Ice carvings always create a lavish impression. If you have no personnel who are adept at carving ice, molds for this purpose can be purchased. Also, glass replicas can be purchased as substitutes.

Live flowers, ferns, and other plants are very good buffet decorations.

Decorated hams, roasts, poultry, or whole fish gain added attention when there is careful planning to develop maximum color contrast with the foods that surround them on the table. Also, you can set these items at a higher level by using an inverted container as a pedastal.

Salads made in fancy molds add much eye appeal.

You can always turn your bowls and platters at various angles, leave space between them, and garnish each to enhance the appearance. NOTE: CAREFUL WITH YOUR GARNISH! Too much can ruin the total effe Don't overdo it.

If you have the available personnel, a meat carver can contribute much to a buffet.

If table skirts are available, they add much to the impressiveness of the buffet. If used, they should hang to 1/4 inch above the floor. If you have no table skirts, white pressed tablecloths may be used.

Various types of lighting can be used to enhance the table. Spotlights might highlight a particular arrangement. When you do use lighting as an added attraction to your buffet, the lighting for the rest of the room should be more subdued.

SELF-SERVICE VS. SERVED

Sometimes when guests serve themselves, they tend to be very generous; at other times, they may be very timid. For a self-service buffet, allow slightly more food than if the same buffet is to be served. Guests do not always take more themselves, but since they do not always know how to serve properly, more food is wasted.

ENTREE

The entree list is always planned first. A predetermined price range will usually control the entree selection. Factors to be considered are: (1) the reason for the buffet, (2) a theme, if any, (3) the number of guests, and (4) the location of the meal.

The entree items are so vast that they cannot be covered in this course. They can range from a steamship round of beef to a cold meat platter. Considering all of the factors involved, this is the place where your imagination comes into play. As an aid in planning your entrees, you can use the Armed Forces Recipe Service or any commericial cookbook.

CANAPES

Canapes, in American cuisine, are usually thought of as items to serve at large gatherings where people eat and drink standing up.

The terms "Canapes" and "Hors d'oeuvres" are often used to mean the same thing. Canapes, however, are generally defined as tidbits that can be picked up without utensils. Hors d'oeuvres, on the other hand, are foods served on plates and are to be eaten with a knife and fork as a first course to dinner or supper.

Since both canapes and hors d'oeuvres are eaten first at a meal, they are both referred to as appetizers.

Canapes, in addition to being easy to eat, must also be colorful, piquant, spicy, or salty.

Canapes may be either hot or cold. For a large group, they are usually displayed on a buffet table, with the cold canapes arranged on large platters and hot canapes served from chafing dishes.

NOTE: CANAPES SHOULD ALL BE BITE-SIZE.

— When preparing canapes, you may use the following guide for quantities:

— At a four-hour reception, regardless of the starting time, prepare 12 per guest.

— For a cocktail hour to be followed by dinner, prepare four per guest.

— For a cocktail reception, to be held from 3:00 to 6:00, prepare eight to ten per guest.

Cold Canapes

Since there is no limit to the variety possible in canapes, this is the place where you can use your imagination.

Canapes consist of a base, a spread, and a garnish.

1. The base can consist of pumpernickel, rye, or white bread cut into numerous shapes. Crackers are also a very acceptable base and can be purchased in different shapes and flavors.

2. The spread can consist of variations of cream cheese, meat, fish, hard-cooked eggs, flavored butter combinations, etc.

3. The garnish can consist of pimiento strips, olives, pickles, radish slices, parsley, etc.

Cold canapes are versatile and convenient. First of all, they can be made ahead of time. Some of the canape recipes even offer creative ways to utilize leftovers. Additional suggestions for cold canapes are:

Stuffed Cherry Tomatoes
Salami Cones stuffed with Cheese-Spreads
Pate
Smoked Oysters
Smoked Salmon
Marinated Vegetables
Stuffed Celery
Herring in Sour Cream
Cheese Trays

Centerpieces For Canape Trays

Colorful centerpieces for trays of cold canapes designed for table display can be made from whole fruits or vegetables. Bite-size canapes can be embedded with picks all around the fruit or vegetable centerpiece. Sometimes a hollow is made in the top of the fruit or vegetable for a container of dip.

Among fruits and vegetables suggested for centerpiece displays are: watermelons, pineapple, pumpkin, honeydew melons, and large heads of cabbage wrapped in foil.

Any vegetables or fruits selected to hold pick-embedded canapes, with or without dip containers, must be heavy enough to stay put while canapes are being removed from them.

Hot Canapes

Canapes piping hot from the oven are always popular buffet treats. You will be intrigued with the many recipes dealing with familiar pastries for mini-bagels, puff pastry, mini-pizzas, and pastry-wrapped franks; you'll find recipes for tarts, quiches, and crackers flavored with cheese, shrimp, beef, or sesame seeds.

Bacon-wrapped tidbits add variety to the buffet; these items should be served in a chafing dish. Many combinations can be prepared such as rumaki (bacon-wrapped chicken livers), additional bacon-wrapped items could be scallops, oysters, mushrooms, shrimp, water chestnuts, etc.

Additional hot items include: miniature meat balls (plain or barbecued), cheddar cheese triangles, stuffed mushrooms, cheese balls, wingettes, drumettes, etc.

Dips For Canapes

Another do-it-yourself system of canape service is the presentation of dips. Most dips are made with cream cheese or sour cream as the basic ingredient. To heighten the flavor of either of these, use one of these suggested additions: chopped clams, sauteed onions, garlic, etc.

The consistency of a dip should be about that of mayonnaise.

The "dippers" should be crisp and within easy reach of the bowl of dip. Popular dippers are potato chips, corn chips, pretzels, crackers, miniature bread rounds (pumpernickel or rye), celery sticks, carrot sticks, cauliflower buds, etc.

FANCY HARD COOKED EGGS

Decorated in numerous imaginative ways, hard cooked eggs are basic to buffet presentation. With a spiced-up stuffing, these eggs are a decoration that rates as good eating too.

RELISHES

A Lazy Susan arrangement of relishes served with rolls or crackers and cottage cheese has gained wide acceptance in America as a first course. Many of the relishes to be used can be purchased ready to serve.

The arrangement of the relish assortment should make the most of the contrasting colors and shapes of basic ingredients. Among the many purchasable relishes are cranberry, corn, green tomato, spiced fruits, mixed pickles, etc.

FRUIT

Fresh fruit must also be considered in buffet planning. A Horn of Plenty or Cornucopia makes an attractive corner piece when filled with colorful fruits.

Large watermelon baskets are the most common carved fruit appearing on the buffet tables (see Page 3-10). The watermelon basket has two advantages. It provides the container, and the fruit scooped from it provides the major portion of fruit needed to fill it. Watermelons can be carved in several ways as shown in the sample provided. One selected for this use should be fresh, with a rich green rind and no bruises.

Fruits in watermelon baskets are usually eye-catching. Basket arrangements can be accented with strawberries and a slight touch of mint leaves. Also, black grapes provide a dark contrast. The fruit combination is unlimited.

Grapefruit and orange baskets (see Page 3-12) add an additional touch to a buffet table. The fruit combination can be honeydew wedges, cantaloupe balls, orange and grapefruit sections, bits of apples, pears, pineapple, and whole grapes.

Additional items that can be made into baskets are cantaloupes, honeydew melons, Spanish melons, and pineapple.

When pineapples are used for carving, they should be fresh and not over-ripe. (See samples on Page 3-14.) They can be quickly carved into stands (for picks holding ham cubes or pineapple balls), carts (using slices from a second pineapple for wheels), or bird houses. With a special cutter, one half pineapple can be made into a bird of paradise.

CHEESE

Cheese should accompany fruit on a buffet table. Cheese should be displayed on a clean board and displayed for easy self service. Each type cheese should be clearly identified.

SALADS

Salads, whether for the buffet or for other services, are divided into two classes.

1. Simple salads - these are made entirely from greens or from other vegetables.

2. Combined salads - these are made with several types of ingredients. Included in this class would be fish, meat, gelatin, and fruit salad.

Salad is served as an appetizer, an accompaniment to the entree, or as the main course of a meal. For this reason, the size of the portion is varied, although the combination remains the same. The decoration of combined salads also plays an important role, since they glamorize the buffet.

Adapted to buffets, many salads may be used to your advantage. Gelatin salads are of particular interest since they can be arranged attractively on platters and are very bright and colorful. Numerous styles of gelatin molds (fish, crowns, and rounds) are available from commerical sources. The general rule when preparing gelatin for molds is to reduce the water by 3/5 of the specified amount. The impressiveness of the mold will depend on the arrangement of fruit, vegetables, or meat, and the color combinations worked out.

BREAD

The type of bread offered should fit the meal. If the entree is a cold meat platter, you can use a variety of dinner rolls (regular, poppy seed, sesame seed, hard, onion, etc). Bread can be procured in different flavors, shapes, and sizes. Miniature rye and pumpernickel breads add to a buffet table. The point to remember is that you have numerous types of bread and rolls available from the commerical bakeries.

PASTRY

These sweet dishes are very important on the buffet. Often the theme cake might be the centerpiece. Cakes are usually presented in their original decorated form and are cut on the buffet.

74

WATERMELON

Watermelon is seasonable. There has been little variety in serving it, so we will give you a few new ideas on various attractive ways of serving this fruit. Baskets can be made from it, and it can be carved with attractive designs.

No. 1. Cut watermelon this way with a stand on top. Or, put two stands on the top. You can place other fruit on top with the aid of toothpicks to make wonderful table decorations.

No. 2. Shows how to remove the inside of a half of a watermelon. Carve edge like a picket fence. When hollowed out, it is filled with watermelon and other fruits and used for buffet tables.

No. 3. Shows a basket with carving all around the edges and on the long handle.

No. 4. A basket with split handle at each end makes an attractive piece.

No. 5. A boat-like basket with shields on top edges.

No. 6. Shows three standing baskets without handles, all with carved sides.

No. 7. Shows a basket especially appropriate for a graduation dinner. Make the figure resemble the person for whom the party is held.

No. 8. Do not carve designs too deeply. Color with fruit coloring.

No. 9. A bear scene for a hunting party.

No. 10. Watermelon with a carved cover and with hollowed-out lower half to be filled with other fruit. This is especially attractive.

80

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GRADUATION
ANNA
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ORANGE BASKET

These are easy to make, no special skill is required, and they can be used on any table.

No. 1. Select an orange with a good color. Mark handle and top of the basket.

No. 2. Cut away the section as shown here to bring out the handle.

No. 3. The handle fully cut out.

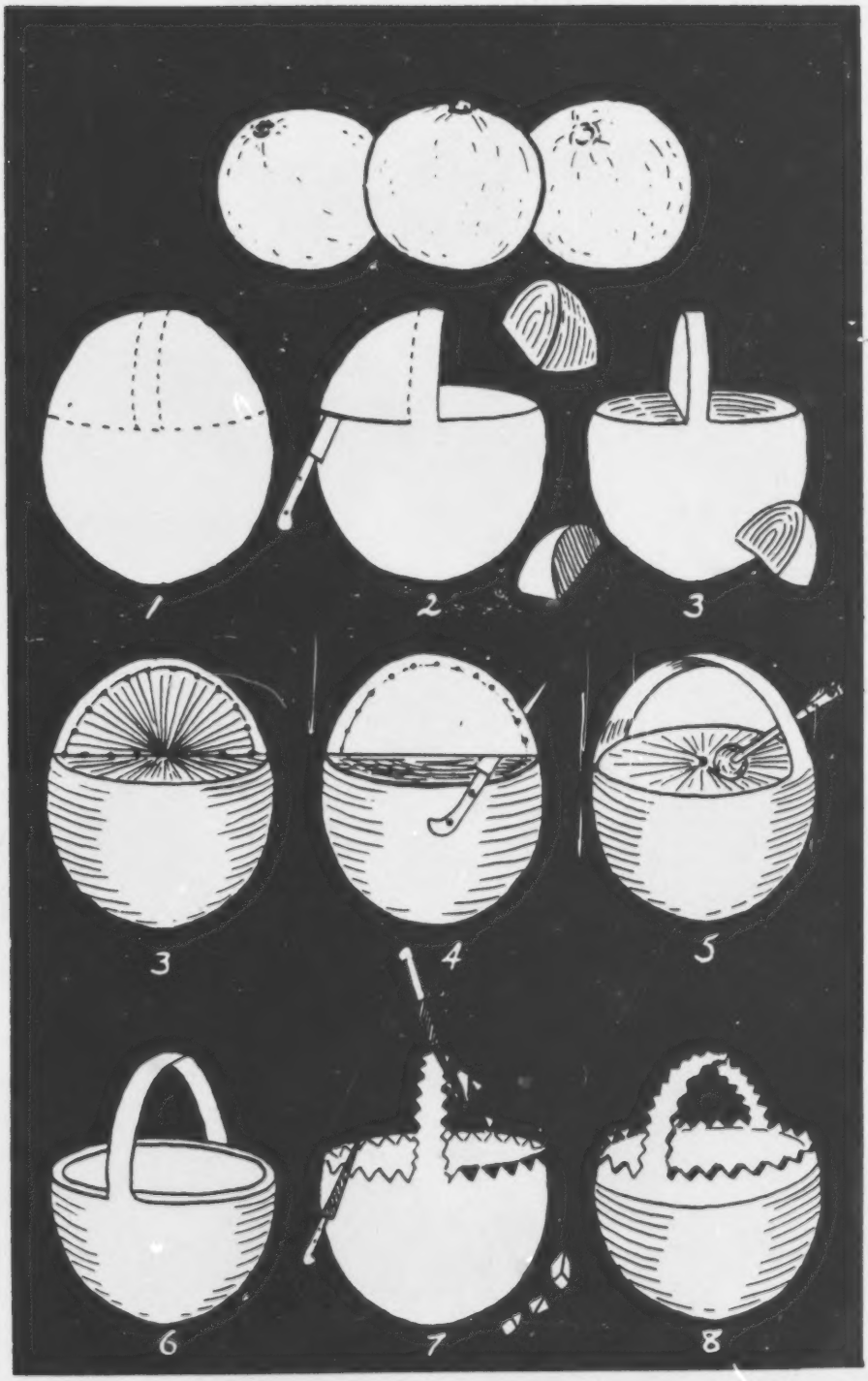
No. 4. Remove the inside by cutting along line.

No. 5. After the handle is completed, remove the inside of the half of the orange.

No. 6. The finished basket.

No. 7. An easy way to decorate it.

No. 8. The finish perfect basket.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78

PINEAPPLE

There are only a few ways to serve pineapple. We will try to show you a few of the most attractive ones here.

No. 1. Cut off top about two inches deep.

No. 2. Cut inside on dotted line and remove the inside. This can be sliced or diced and put back into the pineapple.

No. 3. This cover has two strong toothpicks in front and in back to hold it.

No. 4. Fill with fruit and decorate with whipped cream.

No. 5. Following the dotted line, cut about two inches above the bottom. Leave the top leaves untouched.

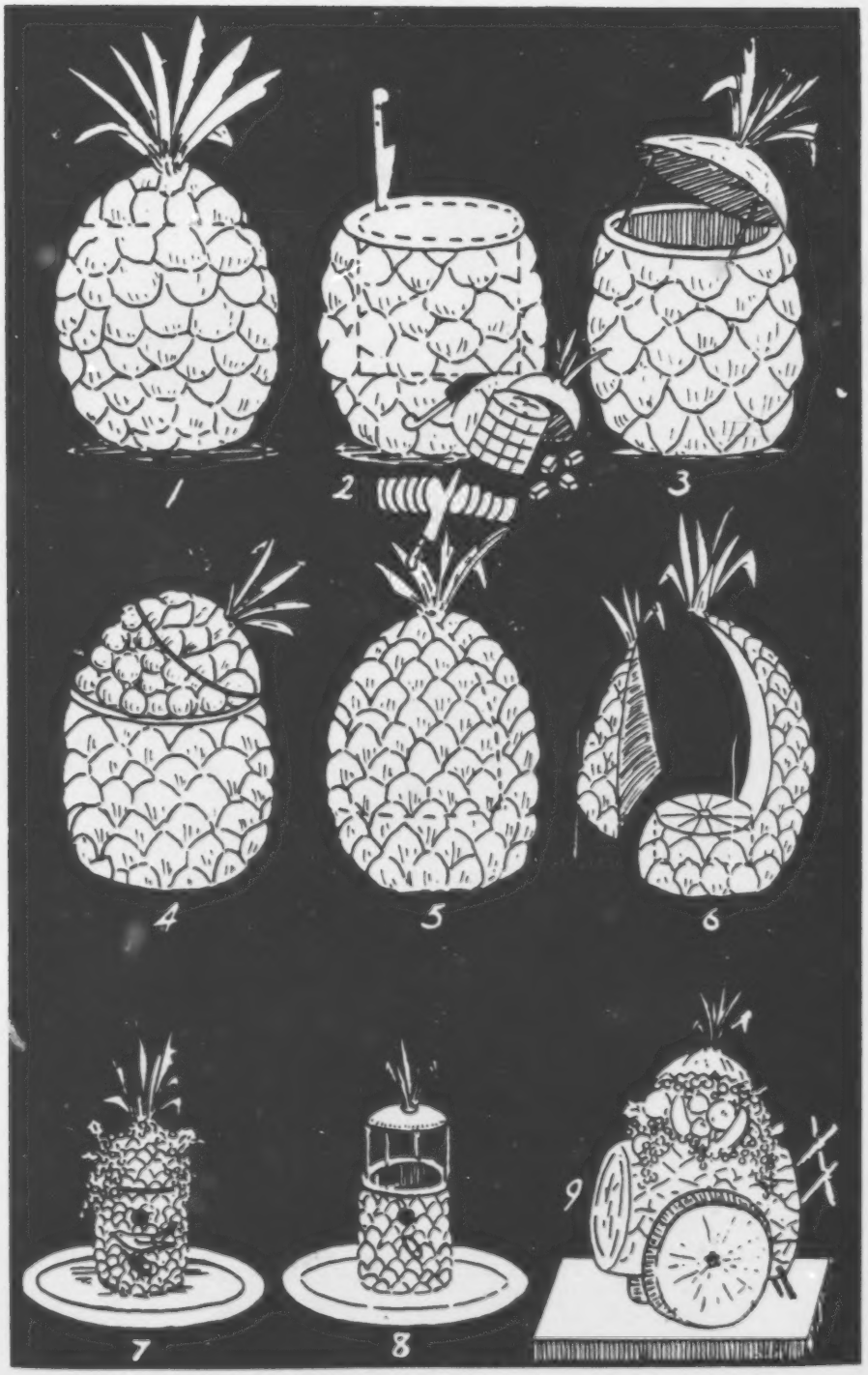
No. 6. Fruit can be placed on this attractive stand. Care must be taken in arranging fruit not to overload it. Smaller fruits, such as grapes and berries, should be used near the top.

No. 7. This is a bird house, made as in No. 3. Cut a hole in the side for the nest entrance. A bird can be carved out of a rutabaga. Choose a specific type of bird and color it to make it attractive.

No. 8. This is a bird house with a raised top.

No. 9. Shows a chariot full of fresh fruit. Hollow out the top and, from another pineapple, make wheels. Use some wood for the handle and legs. Instead of putting the top of the pineapple on the fruit, put it on the front of the chariot if you wish.

84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HOW TO CUT LEMONS

No. 1. Just plain, sliced lemons, placed on a platter as a border.

No. 2. Whole lemons grooved and sliced with rind on. Place on platter.

No. 3. Lemon sliced, cut in half, with dotted sections representing portion covered with chopped parsley. The center has red Hungarian or Spanish paprika on it.

No. 4. A full slice of lemon with half of meat cut out. Skin is rolled inside. This also can be sprinkled with fine parsley. Both designs, above and below, can be used on food itself, or as platter border decoration.

No. 5. Second row shows lemon cut in six wedges. Each lemon is cut in half, each half cut twice. This type is used for platter or tea glass decoration. Cut the skin side and place over the top of the glass.

No. 6. Shows a full slice of lemon with skin removed and the ends cut. In the center of this slice is an anchovy ring. The anchovy is wound around the finger and filled with capers. This is placed on the food itself, as it can be eaten. This is served with fish.

No. 7. Lemon sliced with skin on. Pieces are cut from the slice as shown here to form a cross. Each section can be a different color: green with chopped parsley, red with paprika, brown with anchovy butter, and the other black with caviar.

No. 8. Shows full lemon slice partitioned and covered with different items as was No. 7.

No. 9. To make a basket, cut out each side of an end and cut out the meat from the handle also. The bottom is trimmed a little so that the basket will stand.

No. 10. This shows the basket when finished. It can be used to serve cold sauces.

No. 11. Cut into a barrel shape. Cut off top and remove insides of lemon. Mark two bands on the side, remove the yellow skin along this band, and place little capers here to represent nails. Fasten the top again with a toothpick and place a carved radish on top of the cover. Use this for cold sauces, also.

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TARTAR SAUCE
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The pastry items are so vast that they cannot all be covered in this course. The pastry can range from a tiered decorated cake to tasty tea cookies.

The age and sex of the attendees should govern the types of pastries provided. If you have more females attending the buffet, an elaborate display of pastries would be appropriate. Considering all of the factors involved, this is another place where your imagination comes into play. Baking fancy pastries is one of the areas that can be time consuming; therefore, commercial bakeries may be able to satisfy your needs.

BEVERAGES

Coffee

This beverage should not be overlooked when planning the buffet. Have an ample supply of cups, spoons, sugar, and cream available.

Punch

Punch should be served from punch bowls. You should use a traditional punch bowl of silver or glass on a base. It should be set on a try with its matching ladle. If you do not have access to punch bowls, they can be rented from commercial sources.

Punch cups should be used for all types of punch. Whatever the mixture, there should be ENOUGH CUPS or GLASSES to serve all guests at once. Usually a 5- or 6-ounce glass is used for punch.

Following are two sample recipes for punch that are suitable for a buffet.

FRUIT PUNCH

1 Bowl - approximately 2 gallons or 60 cups.
2 Quarts - Ginger Ale
2 Quarts - Orange Juice
1 Quart - Lemon Juice
8 Ounces - Grenadine
2 Quarts - Club Soda

Garnish with orange slices, cherries, etc.

MARASCHINO PUNCH

1 Bowl - aproximately 2 gallons or 60 cups.
1 Quart - Maraschino Cherry Juice
1 Quart - Lemon Juice
2 Quarts - Ginger Ale
4 Quarts - Club Soda

Garnish with orange slices, etc.

MISCELLANEOUS

The following items such as flatware, plates, napkins, serving utensils, and trash receptacles should be provided in a sufficient amount. The pieces needed will be determined by the type of service and the number of personnel attending.

Flatware

Plastic disposable flatware is appropriate for MOST buffets. Display the flatware in a neat arrangement.

Plates

Paper plates are appropriate for MOST buffets. If the buffet is planned around a theme, purchase the paper plates with the appropriate decoration. You will also have to determine the size of the plates to be used, whether it is a 4, 6, or 10-inch plate.

Paper Napkins

A fine grade of paper napkins may be procured from commerical sources.

Napkin sizes are:

Luncheon - 18 x 18 in.
Dinner - 20 x 20 in.

Serving Utensils

The serving pieces needed are determined by the type of service and number of food items available. A good supply of tongs, serving spoons, and spatulas should be available.

Trash Receptacles

An adequate supply of trash receptacles should be made available in the reception area. DO NOT place the receptacles near the buffet table.

SELF-QUIZ #3

1. What are "custom foods?" _____

2. Name the three main types of custom foods.

   A. _____
   B. _____
   C. _____

3. When reconstituting dehydrated vegetables and fruits, what two things must you always do?

   A. _____
   B. _____

4. Name four miscellaneous custom foods.

   A. _____
   B. _____
   C. _____
   D. _____

5. When should you plan specialty meals? _____

6. Give two examples of the most common holiday meals.

   A. _____
   B. _____

7. Give one example of a special occasion meal. _____

8. Why should specialty meals be incorporated into your menu planning? _____

9. For specialty meals, the most important component is the _____

10. What is the reason for planning a buffet? _____

    What do you do with the completed plan?

    A. _____
    B. _____
    C. _____

11. When a buffet consists of two tables, what food items go on each table?

    Table 1: _____
    Table 2: _____

SELF-QUIZ #3 *(Continued)*

12. Cite five items that can be used to decorate a buffet table.

    A. _____
    B. _____
    C. _____
    D. _____
    E. _____

13. Explain how food presentation can enhance buffets. _____

14. What should you do differently when you prepare buffet items which are to be "self-served?" _____
    _____

15. Define "canape." _____

16. Define "hors d'oeuvre." _____

17. Name the three basic ingredients of a canape.

    A. _____
    B. _____
    C. _____

18. Name five types of food items which are good buffet items.

    A. _____
    B. _____
    C. _____
    D. _____
    E. _____

19. Describe an effective way to use a watermelon on a buffet table. _____
    _____

20. Describe the two classes of buffet salads.

    A. _____
    B. _____

21. What are the two types of beverages used at a buffet?

    A. _____
    B. _____

ANSWERS TO SELF-QUIZ #3

1. "Custom foods" refers to ***various types of labor-saving and space-saving processed foods.*** (Page 3-3)

2. The three main types of custom foods are:

   A. Canned
   B. Dehydrated
   C. Frozen (Page 3-3)

3. To reconstitute dehydrated foods, ***you should first discard the desiccant bag and then add liquid according to directions on the recipe card or container.*** (Page 3-3)

4. You should list four of the following miscellaneous custom foods:

   A. Bakery mixes
   B. Instant pudding
   C. Soup base
   D. Gravy base
   E. Prepared salad dressings
   F. Dry icing mix
   G. Prepared icing
   H. Dessert topping
   I. Individual portion packs of condiments
   J. Instant cooked cereals (Page 3-4)

5. Specialty meals should be planned for (A) ***holidays*** and (B) ***special occasions.*** (Page 3-4)

6. Two common holiday meals are (A) ***Thanksgiving*** and (B) ***Christmas.*** (Page 3-4)

7. ***Coast Guard Day*** is an example of a time you might serve a special meal. (Page 3-4)

8. Specialty meals should be incorporated into your menu planning to ***provide your crew with an opportunity to socialize more at meals. It also provides a "focal point" for attention.*** (Page 3-4)

9. For specialty meals, the most important component is the ***entree.*** (Page 3-4)

10. Buffets should be carefully planned so that ***all foods can be effectively prepared and be served on time.*** Planning also is ***necessary to ensure the best method of presentation*** (decorations, etc.). After the plan is laid out, you should (A) ***write it down,*** (B) ***review it well ahead of time with your fellow workers,*** and (C) ***post it in plain view of your workers.*** (Page 3-6)

11. If you have two buffet tables, the food items on each should be as follows:

    Table 1: Appetizers, salads, breads, relishes, and entrees
    Table 2: Desserts, cheese, and fruit (Page 3-6)

ANSWERS TO SELF-QUIZ #3 *(Continued)*

12. You should list five of the following items you may use to decorate a buffet table:

    A. Ice carvings (or a reasonable facsimile)
    B. Live flowers, ferns, or other plants
    C. Specially decorated meat items (ham, roast, poultry, or whole fish)
    D. Salads made in fancy molds
    E. Various garnishes
    F. Table skirts
    G. Special-effects lighting
    H. An individual actually carving the meat on the serving line (Page 3-7)

13. Proper food presentation ***enhances eye appeal. Sometimes the method of presentation will cause people to try items they might otherwise reject.*** (Page 3-7)

14. If you prepare buffet items which are to be "self-served," you should ***prepare slightly more than if the items are to be served.*** (Page 3-7)

15. A canape is ***a small tidbit of food that can be picked up and eaten with the fingers;*** no eating utensils are necessary. (Page 3-7)

16. An "hors d'oeuvre" is ***a small serving of food that must be eaten with a spoon or fork.*** (Page 3-7)

17. The three basic ingredients of a canape are: (A) ***a base***, (B) ***a spread***, and (C) ***a garnish.*** (Page 3-8)

18. You should list five of the following types of food items which may be served on a buffet:

    A. Entree
    B. Canapes
    C. Dips
    D. Hard-cooked eggs
    E. Relishes
    F. Fruit
    G. Cheese
    H. Salads
    I. Bread
    J. Pastry
    K. Beverages

    (Pages 3-7- 3-18)

19. Watermelon is very effective on a buffet table when it is carved out into some sort of creative design. You may even make melon balls out of the inside and use these to fill it back up. You might also add other fruit items. (Page 3-9)

20. The two types of buffet salads are:

    A. Simple - made entirely from greens or from other vegetables.
    B. Combined - made with several types of ingredients such as fish, gelatin, or fruit. (Page 3-9)

21. The two types of beverages used at a buffet are (A) *coffee* and (B) ***punch.*** (Page 3-18)

READING ASSIGNMENT #4

Pages 4-3 through 4-12

"Yeast-Raised Products/Sweet Doughs"

OBJECTIVES

After completing this assignment, you should be able to:

1. State the six basic ingredients used in baking breads; describe the functions of each.
2. Tell how to activate dry yeast.
3. State the nine basic steps for preparing straight dough.
4. Describe progressive dough characteristics during the mixing process.
5. Describe the fermentation process.
6. Define "punching."
7. State the purpose of the proofing process.
8. Describe the makeup process for bread dough.
9. Describe the baking, cooling, and storing process for bread.
10. Cite uses for leftover bread.
11. Explain what "rope" is.
12. Describe procedures for eliminating rope.
13. Explain what "mold" is.
14. Describe procedures for eliminating mold.
15. Explain how the short-time method differs from the straight-dough method of production.
16. Explain how sweet doughs differ from regular bread doughs.
17. Name the two types of sweet dough.
18. Explain what is meant by "retarded" dough.
19. Describe what effect excessive fat absorption has on doughnuts.
20. Explain how coating/glazing doughnuts differs from other sweet doughs.

YEAST-RAISED PRODUCTS

INTRODUCTION

In your SS course, you learned the techniques of baking quick breads. In this course, we are going to introduce you to a type of baked product which is a little more difficult to prepare -- the yeast-raised product. Yeast-raised products include breads, bread rolls, sweet-dough rolls of various kinds, coffeecakes, doughnuts, and pizza.

The production of yeast-raised products, especially bread and sweet doughs, is considerably more involved than the production of other bakery products. If the ingredients are of good quality, are used in specified amounts, and are properly mixed, utilizing proper temperatures, the doughs will yield good quality products such as those shown in Illustration 4-1.

"Bread" is a term that has been used for centuries to describe a mixture of flour, sugar, shortening, salt, and liquid. This mixture is made into dough. Another ingredient, yeast, is added to the mixture to make the dough rise. The dough mass that results is leavened (fermented) and baked. This same combination of ingredients is used for bread rolls; the major difference is in the makeup and panning of bread and in the shaping of rolls.

Sweet-dough products, including rolls, coffeecakes, and doughnuts, differ from loaf bread and rolls mainly in the proportion of ingredients used. The sweet-dough formula is richer than that used for bread. Sweet doughs contain more sugar and fat than do bread doughs and contain eggs and spices, ingredients not usually found in bread.

Yeast-raised doughnuts differ from basic sweet-dough products mainly in the method of cooking. The formula is similar to that of lean sweet dough. Changes take place within the dough at a rate determined by the ingredients in the formula, the temperature of the dough, and the conditions surrounding the dough. Quality is determined by the speed, completeness, and uniformity with which these changes occur. The baker must understand the functions of each ingredient, then use the ingredient properly (manner of mixing and amount used).

BAKING INGREDIENTS

WHEAT FLOUR

Flour is a mixture of protein, starch, and other materials. These proteins, when combined with moisture, form gluten, which gives doughs and batters texture. The elasticity of dough is due to a gluten which expands and holds the gas bubbles given off as yeast ferments in the dough.

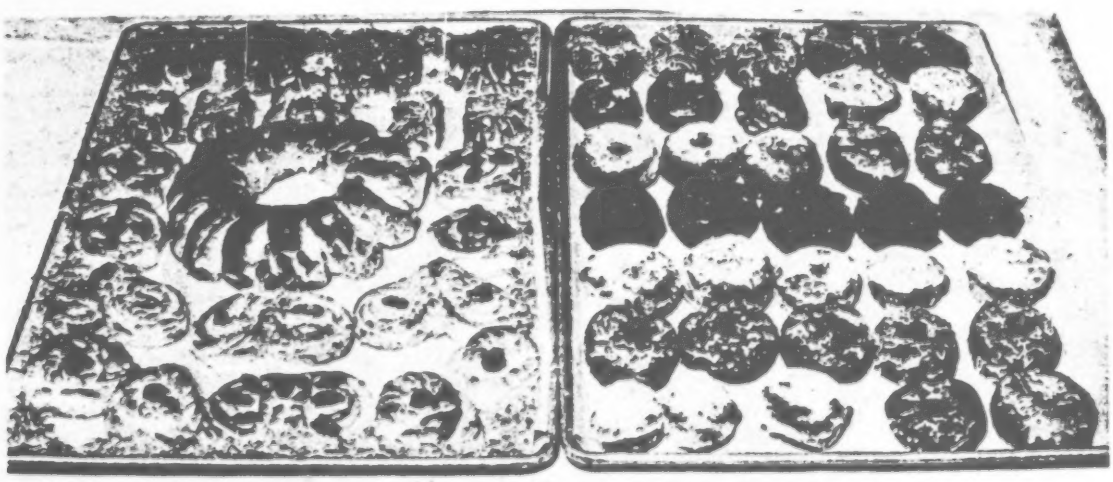


Illustration 4-1. - Pastry-Bar Varieties.

89

There are several kinds of wheat flour, and each is suitable for particular products. Hard-wheat and soft-wheat flours are used in the enlisted dining facility. Hard-wheat is used in bread and is often called "bread flour." It is an enriched, bleached product. Hard-wheat flour is strong in gluten content, whereas soft-wheat flour is not. Strength of flour to hold gas is less desirable in cakes; therefore, soft-wheats produce flour suitable for cakes and cookies.

RYE FLOUR

Medium color rye flour is available for bread. Rye flour is combined with white, hard-wheat flour to produce rye bread.

WHEAT BASE

Wheat base is prepared from the germ, bran, and other fragments of wheat kernels. It has a whole-wheat type flavor and may be combined with white flour to produce whole-wheat bread and other baked items. Because this base is a stabilized product, it has a longer storage life than whole-wheat flour and is, therefore, used instead of whole-wheat flour in military dining facilities.

WATER

This is one of the basic ingredients of bread. The functions of water in baking are listed below:

(1) Water is necessary to form gluten from the protein of flour; this gives dough its elastic and gas-retaining properties.

(2) The amount of water used determines the consistency of the dough. For good bread, the amount of water must be measured to produce a dough that is neither too stiff nor too soft; this will vary with the amount and quality of the protein in the flour and the type of product being made.

(3) Water temperature regulates dough temperature during mixing.

(4) Water dissolves salt and sugar and aids in distributing these materials uniformly through the dough.

(5) Water makes it possible for the enzymes to act on flour and for the yeast to cause fermentation.

NOTE: If water supplies contain either very soft or very hard water, your dough will be affected.

SALT

This is one of the basic ingredients of dough; its use in the proper amount is important for the production of good bread, and its functions should be understood.

Salt toughens the gluten, making the dough more plastic and elastic. Weak glutens are strengthened by salt; the resulting bread has improved grain. Doughs containing salt will ferment more slowly than those without salt. Salt improves the flavor of bread and whitens the crumb by producing bread of a finer cell structure. Salt controls the action of the yeast. It will prevent the growth of wild yeast, which, in long fermentations, enters the dough from the flour and the air.

YEAST

Yeast is a microscopic one-celled plant that is found everywhere in nature where sugar is present. Yeast is important primarily in bringing about fermentation, but it is also a nutritious food, being a good source of some important vitamins and enzymes. Yeast is of great importance to the baker. It transforms heavy dough into a light, porous, elastic mass from which appetizing, digestible, and nutritious products are baked. Yeast activity begins as soon as the ingredients are mixed and continues until the heat of the oven destroys it.

Doughs ferment best around 80° F. At temperatures below that, fermentation will be slow. At higher temperatures, fermentation may proceed more rapidly than dough is conditioned; that is, the dough will be forced to expand rapidly before it has become soft and pliable.

Suspend active dry yeast in water at 105° to 110° F. for 5 minutes or follow manufacturer's instructions. Colder water results in slower fermentation, and warmer water may harm the yeast. Hot water is NEVER used.

Active dry yeast does not require refrigeration, but should be stored in a dry and reasonably cool place. When properly stored, dry yeast will keep for many months.

SUGAR

The refined granulated sugar is derived from sugar cane and sugar beet. This is the type used for making bread. Breads and pastries become more

tender as the amount of sugar is increased. In yeast-raised products, however, fermentation will be slowed down when the amount of sugar is greater than 6 percent.

SHORTENING COMPOUND

Shortening is any edible fat used in bakery goods. The effect is to improve tenderness, thus making the product "short."

Shortening compound is prepared from deodorized animal or vegetable fats or oils. General purpose shortening is intended for many uses in food production. Bakery (emulsifier)-type is intended for specific use in cake baking or preparation of some types of frosting. Deep-fat cookery type should be used for deep-fat frying only. Both butter and shortening have a uniform platic texture and are workable at a range of 65° to 95° F. General-purpose shortening should not be substituted in recipes that specify bakery-type shortening.

Plasticity

The term "plasticity" refers to the shortening value and ease of blending of a fat. Fats vary in their degrees of hardness or plasticity, depending upon whether oil or soft fat has been used. Plasticized fats are "creamed" and can easily be worked into flour, as in the case of pie dough. They can also be combined readily with sugar to produce a creamy texture.

BUTTER

Butter is not actually a basic ingredient for all yeast-raised products. It is, however, used in preparing specific bread recipes, such as butter rolls. It is also used quite often in the production of sweet doughs.

MILK

Milk is not one of the basic ingredients for bread; however, it contributes so much to bread quality that it is included in Armed Forces recipes for white and raisin breads. The use of milk is recommended for all sweet-dough formulas for the increased tolerance it gives the dough during fermentation and makeup.

For white bread, conventional nonfat dry milk, style A, should be used. Style A, a high-heat milk, is designed specifically for achieving volume, flavor, and crust characteristics desired in yeast breads.

EGGS

The use of eggs is recommended for the richness, flavor, improved texture, and keeping quality they give to products such as sweet doughs.

Yolks and whites differ greatly in their effects in baking, both because of the fat in the yolk and because the protein of the yolk is very different in its properties from that of the white. This is evident from the foam produced by whipping the whites. Egg whites give a stiff foam of high volume, whereas the foam given by the yolks is weak and of low volume.

Shell eggs, frozen whole eggs (baker/ type), and dehydrated egg mix are the types of eggs used in the production of baked goods.

SPICES

These may be used to add flavor or variety to the baked product, but care should be used in both the selection and the amount of spice used. The preservative or antiseptic qualities of some spices influence fermentation. Mace, nutmeg, and caraway used in normal quantities do not materially affect fermentation.

Cloves, if used in high enough concentration, will slow or even stop fermentation. Cinnamon contains essential oils that retard fermentation. Use of spices should comply with quantities specified in Armed Forces recipes.

YEAST FOODS (DOUGH CONDITIONERS)

Yeast foods, known as dough conditioners, have other more important functions than to supply food for yeast. Their major purposes are to condition the water and to assist in the proper fermentation of the dough.

Yeast foods contain three types of functional ingredients:

(1) Ammonium salts, to supply yeast with a supply of nitrogen for growth.

(2) Calcium salts, to produce the correct amount of hardness in the dough water and to firm the gluten.

(3) An oxidizing agent, to give a firmer, less sticky dough.

In addition, these ingredients contain starch and salt to add bulk so that the yeast food will be easier to scale accurately. The use of yeast foods is often determined by the strength of the flour and the fermentation period desired. Not all flours require yeast food. When the flour requires such material, its addition produces bread of larger volume, better grain and texture, and improved loaf appearance. An excess will produce inferior bread with low volume and coarse grain.

When combining these various ingredients to form a dough, several conversion formulas are available for use. These formulas allow you to vary the percentages of your ingredients in order to produce different types of products. The two formulas used in the AFRS are called (1) true percentages and (2) baker's percentages. These formulas are used (1) in adjusting a recipe to yield a specific number of servings, (2) to produce a specific number of smaller or larger servings, or (3) to use the amount of ingredients available.

The exact procedures for converting a recipe using true percentages are provided on AFRS card D-G 1(1). Procedures for using baker's percentages are provided on AFRS cards D-G 1(1) and (2).

PRODUCTION PROCEDURES

The three methods for preparing yeast-raised doughs are the (1) straight-dough method, (2) sponge method, and (3) short-time method. The straight-dough method is the one used most frequently in the Armed Forces Recipe Service. For purposes of study here, we are only going to discuss primarily the straight-dough method.

The method for preparing straight-dough is as follows:

(1) Mix ingredients

(2) Ferment

(3) Punch

(4) Rest (intermediate proof)

(5) Makeup

(6) Rest (intermediate proof)

(7) Bake

(8) Cool

(9) Store

MIXING

Your bread dough should be mixed as follows:

(1) Combine the yeast with part of the water. (Sometimes a portion of sugar is also added at this point.)

(2) In another bowl, mix together the sugar, salt, nonfat dry milk, and the remainder of the water; add flour to this solution; mix one minute.

(3) Add yeast solution; mix one minute.

(4) Add shortening; mix 10-15 minutes or until dough is smooth and elastic.

NOTE: It is NOT a good practice to add shortening to dry flour. Shortening has a waterproofing effect, and thus affects proper absorption of the liquids. This, in turn, affects the quality of your finished product.

As your mixing progresses, the dough will exhibit several developmental characteristics. When the ingredients are first mixed together, the dough mass will be only moderately cohesive, rather wet, and lumpy (Phase I of Illustration 4-1). As mixing progresses, the flour continues to absorb the liquid, and the mass becomes firmer. The lumpiness begins to disappear, but the dough is still somewhat sticky (Phase II of Illustration 4-1). With further mixing, the dough begins to soften and become more relaxed. The stickness disappears, and the dough takes on a smooth appearance (Phase III of Illustration 4-1).

NOTE: Overmixing causes the dough to break down; elasticity is lost; and the dough becomes sticky and runny.

Phase I Phase II Phase III

Illustration 4-1 - Dough Development.

THERE IS NO RULE GOVERNING THE MIXING TIME OTHER THAN THE FEEL AND APPEARANCE OF THE DOUGH.

If you have access to a dough thermometer, you may wish to check the temperature of your dough after all mixing is complete. This temperature should be in the range of 78° to 82° F.

Mixing should not be underrated in bread dough production. It is the FIRST crucial step.

FERMENTATION

Fermentation is the SECOND crucial step in bread production. It should take place in a clean, odor-free area. The temperature of the area should be 80° - 85° F., and the relative humidity should be approximately 74% - 78%. If the humidity cannot be controlled, you should brush the top of the dough LIGHTLY with oil or shortening then cover it with a damp cloth. This keeps the dough from drying out and keeps a crust from forming on the dough as it rises. You should also lightly grease the bowl in which the dough is allowed to rise. Heavy greasing, however, may cause streaks in the bread.

The fermentation area should also be free from drafts (extremes in heat or cold). If the temperature CANNOT be controlled, you will need to take some precautionary measures to help control the temperature of the dough itself. You can do this by wrapping the dough container with paper or cloth. In cases of extreme COLD, the amount of yeast in the dough can be slightly INCREASED. You might also need to increase fermentation time. In cases of extreme HEAT, the amount of yeast can be slightly DECREASED, and the fermentation time can be shortened. In either case, experimentation on your part will be necessary until a quality product is produced.

Fermentation time varies, so you need to check your dough periodically. The time, however, will usually range between 45 minutes and 1 1/2 hours. Fermentation is complete when your dough is approximately double in size. To test it, you insert your fingers about three inches into the dough. If the dough recedes or puckers away from the fingers, it is ready to be punched. If the imprint closes and the dough does not recede, the dough is not ready to be punched.

NOTE: If the dough recedes excessively, the dough has passed the ideal punching time, and it must be thrown out. Common results of overfermentation are pale crust color, sticky dough, poor symmetry, and poor flavor.

Once fermentation is complete, you are ready to proceed to the next step.

PUNCHING

"Punching" the dough actually means that you fold it over from the sides into the middle until most of the gas is expelled. After this is accomplished, you should flip the entire dough mass upside down in the fermentation container. Good punching remixes ingredients to give the yeast new food.

RESTING

After the dough is punched, it is returned to the work bench to be rested 10 to 15 minutes. This resting time allows the dough to relax and become pliable for makeup. A dough that contains more eggs and sugar (rich dough) requires a little less resting time.

MAKEUP

The makeup process actually involves several steps. First, you divide your dough into the proper sizes (loaf size or roll size). If this is done by hand, you need to weigh each piece to ensure uniform size. This step is sometimes called "scaling." You press the gas out of each piece and then mold (round) each one, tucking under the raw edges. (See Illustration 4-2.) The dough should be soft and elastic. As it is rounded, gas escapes, making a squeaking sound. The rounded surface of your dough should be smooth. If the surface is rough, gas will escape during proofing.

After you divide and round your dough, you should pan it (place it in the appropriate pan(s) for baking). It is then allowed to rest again.

RESTING

This second resting (proofing) time is to allow the dough time to recover from the effects of makeup. During this time, the product will about double in volume from the makeup size. The surface will become smooth and light in appearance. Temperatures for this proofing period should be 90° - 100 ° F., and the relative humidity should be 80% - 85%. Time will vary from 15 to 45 minutes; loaves generally take 30 to 45 minutes.

Care must be taken at this stage of production because over-proofing (too much time) will give an open grain, a gray color, loss of flavor, and lower volume.

BAKING

Baking time for bread varies according to the amount of dough in the pan and also according to the size of the pan. When you place your bread pans in the oven, be sure you handle them gently because the dough is fragile and jolting will affect the body of the dough. Also be sure you DO NOT OVERLOAD the oven. An overloaded oven may not regain its heat rapidly enough for the bread to rise correctly. The bread loaves should be far enough apart on the oven racks to allow proper baking all the way around.

During the early part of baking, bread rises quite rapidly. This rapid rise is called "oven spring." On loaves, the exterior is set by heat more rapidly than the interior bakes, so the side of the loaves break (shred) as the interior continues to expand. Rolls,

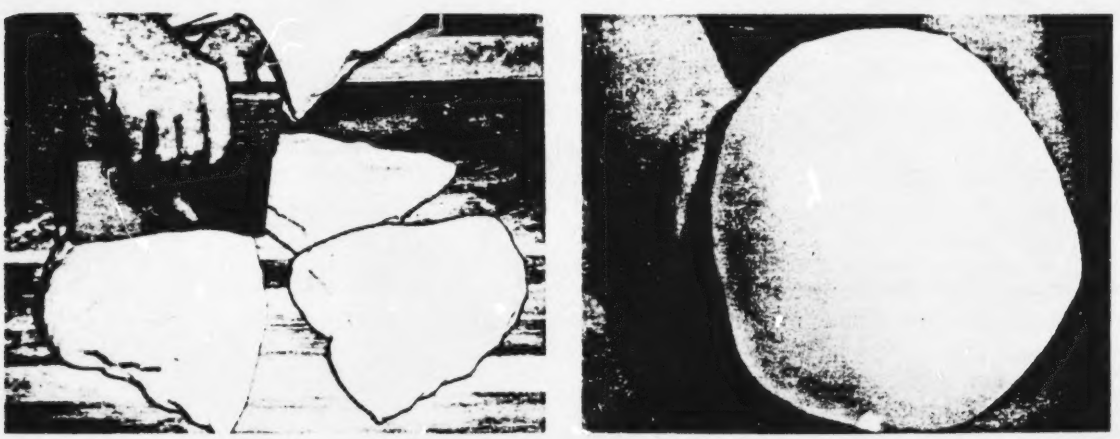


Illustration 4-2. - Dividing and Molding

being smaller, cook more uniformly throughout and, consequently, do not have this breaking in the exterior crust. Bread is done when the internal temperature reaches 208° - 210° F. Also, a well baked bread gives a hollow sound when it is tapped.

NOTE: If you are going to freeze bread or cool it and reheat it later, you should SLIGHTLY underbake it.

COOLING

After baking, remove loaves from the pans and place them at least one inch apart on the cooking racks. DO NOT COVER THEM UP. Instead, brush the tops with shortening so that the crusts will not become dry. Be sure the cooling area is free from drafts. Cooling usually takes 1 1/2 to 2 hours.

STORING

After bread has COMPLETELY cooled, it should be placed in plastic bags if it is not to be consumed immediately. If bread cannot be frozen, it should be baked only in quantities that can be consumed in 48 hours. If absolutely necessary, it can be stored unfrozen up to 96 hours.

If the storage room is hot and humid, you may have to refrigerate your bread; however, refrigeration is NOT the ideal method for storage because bread stales more rapidly under refrigeration than it does at room temperature.

Always be sure you store your bread so that the oldest is used first.

Slightly stale breads can be used for French toast or grilled-type sandwiches without noticeable loss in quality. Leftover breads can be used for bread crumb toppings, croutons, or bread puddings.

Storage Problems

Two conditions which may develop while bread is being stored are (1) rope and(2) mold. Rope spores are formed by bacteria. It causes the crumb of the bread loaf to deteriorate, darken, and become sticky and wet. If the loaf is pulled apart, long, wet strands will appear as it separates. Rope has an odor similar to an overripe cantaloupe. Rope grows best at temperatures between 90° and 95° F. It is inhibited by good sanitation, some acid in the dough, or a mold inhibitor. If your bakeshop does become contaminated with rope, you should follow the procedures below:

- Dispose of all baked products and baking ingredients in the shop.
- Thoroughly clean the shop and all the equipment.
- Wash the bulkheads, decks, and overhead with hot soapy water and rinse them thoroughly.
- Remove all foreign matter from all equipment and tools and from the cracks and seams in the oven.
- Sterilize the workbench and all small equipment.
- Rinse down everything a second time with a strong vinegar and water solution.

Mold, on the other hand, is composed of tiny plants which are visible to the naked eye. There are many types of mold which vary in form and color. They form velvety, colored spots on the bread and create a musty odor. Mold spores are present in the air and will become visible on almost any food substance if they are given sufficient time under proper conditions to develop. Mold will multiply in a warm, humid atmosphere or on moist food. The absence of light and sufficient time also contributes to its growth. Mold first appears on the side of the loaf.

Since mold is not resistant to heat, if there is any present prior to baking, it will probably be killed during baking. This means that any mold on the baked bread is a result of improper handling after baking.

To prevent the formation of mold in the bakeshop, follow the precautionary measures below:

- Keep the shop clean and dry.
- Ensure proper circulation of air in the shop.
- Ensure that all areas are lighted.
- Bake bread thoroughly and cool properly before storing it.
- Always avoid handling the bread with wet or damp hands.

- Ensure that bread is not kept for any length of time, since bread molds very quickly in storage.

SHORT-TIME METHOD

All of the preceding discussion has been on the straight-dough method of bread production. Another method which is often used in the Coast Guard, particularly on ships, is the short-time method. This method was developed to meet feeding requirements where time and space are limited. This procedure eliminates the intermediate proof and the final loaf-molding operation. The result is a modified sponge-type dough which produces a very good bread. The important thing is that you reduce your total preparation time considerably. Normal time is 5 to 6 hours; using the short-time method, time is 2 to 2 1/2 hours. Many of your AFRS cards provide you with instructions for preparing various breads using both the straight-dough method and the short-time method. This gives you some latitude in your baking requirements.

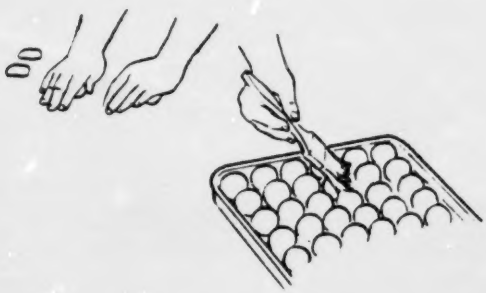
HOT ROLL PRODUCTION

Dough for hot rolls differs from regular bread dough primarily in that it is a richer formula, and less mixing is required. Formulas for different types of rolls differ; however, regular bread dough may be used to make rolls of good quality.

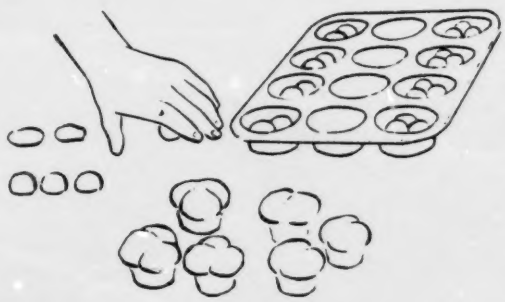
The steps for roll production are essentially the same as for bread. See Illustration 4-3 for variations in hot roll makeup.

BREAD AND ROLL MIX

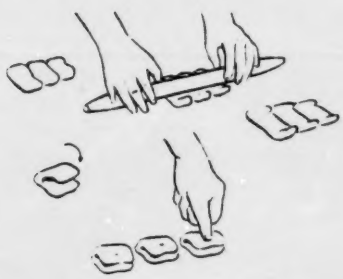
Many CG dining facilities now use bread and roll mixes. They are timesaving and, except for water and yeast, all the necessary ingredients are already premeasured and combined. The yeast is packaged separately in moisture-proof packets. Be sure you follow all instructions exactly as specified on each mix.



Pan rolls



Clover leaf rolls



Parker House Rolls

Illustration 4-3: Hot Roll Makeup

VARIETY BREAD PRODUCTION

There are many variations to your basic bread recipe. In a CG dining facility, you may be required to make rye bread, wheat bread, raisin bread, French bread, pizza, or some other variation. Though the BASIC procedures are provided in this reading assignment, you should consult the specific recipe card from Section D (Breads and Sweet Doughs) of the AFRS.

SWEET DOUGH

Sweet doughs are among the variations to your basic bread recipes. Sweet doughs have more sugar, shortening, and eggs; they are "richer" than regular bread doughs. Most sweet dough products also contain various flavorings and spices. In this regard, you should remember that excessive use of some spices can adversely affect your finished product. Also, since sugar slows down the yeast action, sweet doughs generally have a higher yeast content than other doughs. Even though sugar increases both fermentation time and cost, this ingredient is what causes your product to be more tender and to keep longer.

Mixing sweet dough is no more difficult than mixing any other type yeast-raised dough. The fermentation times, however, may be somewhat less because the dough must be handled so much during makeup. Just be sure you always follow the AFRS card VERY CAREFULLY for each specific recipe you prepare.

There are two types of sweet dough. They are (1) regular sweet dough and (2) Danish pastry. The primary difference in these two doughs is in texture. Regular sweet dough products have a fine, even grain and texture; Danish pastries have a flaky texture. Fermentation of Danish pastry is slowed down (retarded) by refrigeration. Because of the high butter content of Danish pastry, refrigeration is necessary to keep the butter from melting and soaking into the layers of dough. This refrigeration, of course, takes extra time and space. Since very few Coast Guard facilities have either the time or the refrigerator space necessary to prepare this type pastry, a regular sweet dough can often be utilized for basically the same purpose.

NOTE: If space permits, the one advantage in using retarded doughs is that they can be prepared ahead of time, perhaps during a slack period, and baked sometime later.

Once you have perfected a particular sweet dough recipe, you may just continue using the same basic dough and simply vary it by:

(1) Using a variety of shapes (See Illustration 4-4)

(2) Using different fillings

(3) Varying the finish or glaze of the baked product

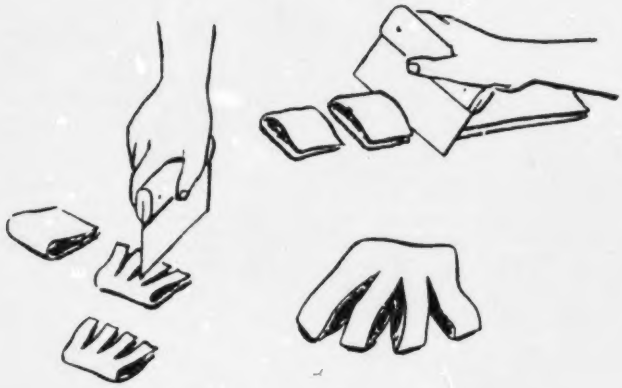
Doughnuts

Doughnuts can be made from your basic sweet dough recipes. Specific instructions are provided in the AFRS. You do, however, have commercially-prepared doughnut mixes which are often used in CG dining facilities. If you use these, simply follow the instructions on the packages.

An important point to note in preparing doughnuts is that the sugar content, to some extent, influences the amount of browning and fat absorption during frying. Some fat absorption is needed for a high quality product; however fat-soaked doughnuts are heavy, greasy tasting, and they stale very rapidly.

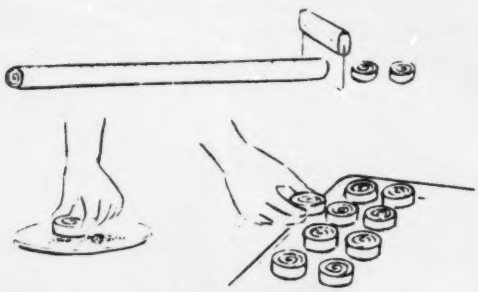
Normally, sweet breads are glazed while they are still hot, but doughnuts must be drained and cooled before glazing or coating them.

This reading assignment has provided you with only the basic information for preparing yeast-raised products. You should remember that each recipe will vary somewhat. Amplification on baking procedures is provided in Food Service Operations (NAVSUP-421). There are also many commerically-prepared texts which are excellent sources of reference.

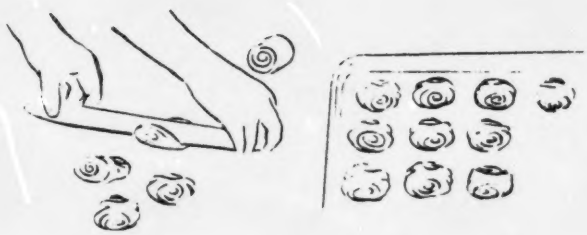


Bear Claws

Coffee Cake

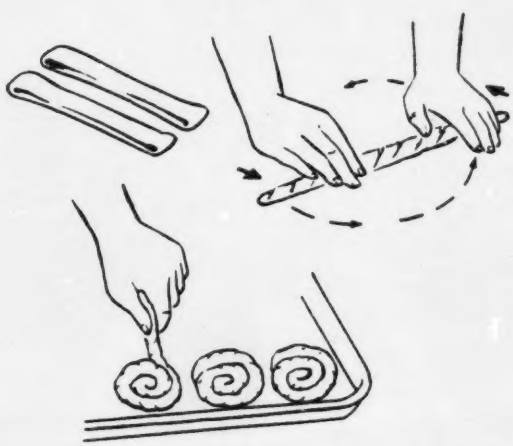


Sugar Rolls



Cinnamon Rolls (Butterfly)

Coffee Cake



Snails

Illustration 4-4: Sweet Dough Makeup

SELF-QUIZ #4

1. Draw a line from the ingredient in Column A to its function in Column B.

A	B
FLOUR	Toughens the gluten; improves flavor
SUGAR	Makes dough light and porous
SHORTENING	Regulates dough temperature
SALT	Makes breads more tender
LIQUID	Contains gluten-forming properties
YEAST	Makes the product "short"

2. When you activate dry yeast, what should the water temperature be? _____

3. Draw a line from the preparation procedure in Column A to the appropriate descriptive phrase in Column B.

A	B
MIXING	Area for this step should be free from drafts
FERMENTING	Scaling helps guarantee uniform sizes
PUNCHING	Do not overload
RESTING	Place in plastic bags
MAKEUP	Dough exhibits several developmental characteristics
BAKING	Allows dough to relax
COOLING	Loaves should be at least one inch apart
STORING	Flip the dough mass upside down

4. What characteristic is exhibited by an overmixed bread dough? _____

5. What is a good test to see if dough has fermented long enough? _____

6. If dough overferments, what should you do to it? _____

7. How do you "punch" a bread dough? _____

8. What is "proofing" for? _____

9. During what stage of bread production do you round the dough and tuck under the raw edges? _____

99

SELF-QUIZ #4 ***(Continued)***

10. If you intend to freeze bread, how should you bake it? _____

11. Why should you NOT store bread in the refrigerator? _____

12. For what purposes can you use leftover or slightly stale bread?

    A. _____
    B. _____
    C. _____
    D. _____

13. How does "rope" affect bread? _____

14. Cite three procedures for eliminating "rope" in a bakeshop.

    A. _____
    B. _____
    C. _____

15. How does "mold" affect bread? _____

16. Cite three precautionary measures for discouraging the growth of mold.

    A. _____
    B. _____
    C. _____

17. What is the primary reason for using the short-time method of bread production? _____

18. Sweet doughs contain more _____, _____, and _____ than regular bread doughs.

19. What are the two types of sweet doughs?

    A. _____
    B. _____

20. What do you do to bread dough to "retard" it? _____

21. Fat-soaked doughnuts are _____ and _____.

22. What must you do to a fried doughnut before you coat it with sugar? _____

105

ANSWERS TO SELF-QUIZ #4

1. Flour - Contains gluten-forming properties
   Sugar - Makes breads more tender
   Shortening - Makes the product "short"
   Salt - Toughens the gluten; improves flavor
   Liquid - Regulates dough temperature
   Yeast - Makes dough light and porous (Pages 4-3 - 4-5)

2. To activate dry yeast, your water temperature should be ***105° to 110° F.*** (Page 4-4)

3. Mixing - Dough exhibits several developmental characteristics
   Fermenting - Area for this step should be free from drafts
   Punching - Flip the dough mass upside down
   Resting - Allows dough to relax
   Makeup - Scaling helps guarantee uniform sizes
   Baking - Do not overload
   Cooling - Loaves should be at least one inch apart
   Area for this step should be free from drafts
   Storing - Place in plastic bags (Pages 4-6 - 4-9)

4. An overmixed bread dough ***breaks down, the elasticity is lost, and it is sticky and runny.*** (Page 4-6)

5. Dough has fermented long enough ***if you can push your fingers down into the dough, and it recedes or puckers away from your fingers.*** (Pages 4-7)

6. If dough overferments, ***you should just throw it away and start all over.*** (Page 4-7)

7. To "punch" a bread dough, ***you fold it over from the sides into the middle, then you flip the entire dough mass upside down.*** (Page 4-8)

8. "Proofing" ***allows the dough to relax and become pliable for makeup or baking.*** (Page 4-8)

9. During ***makeup*** you round the dough and tuck under the raw edges. Page 4-8)

10. If you intend to freeze bread, ***you should slightly underbake it.*** (Page 4-9)

11. You should NOT store bread in the refrigerator because ***bread stales more rapidly under refrigeration than it does at room temperature.*** (Page 4-9)

12. Use leftover or slightly stale bread for: (Select only four)

    A. French toast
    B. Grilled-type sandwiches
    C. Croutons
    D. Bread puddings
    E. Bread crumb toppings (Page 4-9)

13. "Rope" ***causes bread to deteriorate, darken, and become sticky and wet.*** (Page 4-9)

ANSWERS TO SELF-QUIZ #4 *(Continued)*

14. You should have listed three of the following procedures for eliminating "rope" in the bakeshop:

    A. Dispose of all baked products and baking ingredients in the shop
    B. Thoroughly clean the shop and all the equipment
    C. Wash the bulkheads, decks, and overhead with hot soapy water and rinse them thoroughly
    D. Remove all foreign matter from all equipment and tools and from the cracks and seams in the oven
    E. Sterilize the workbench and all small equipment
    F. Rinse down everything a second time with a strong vinegar and water solution (Page 4-9)

15. Mold ***forms velvety, colored spots on the bread.*** (Page 4-9)

16. You should have listed three of the following precautionary measures for discouraging the growth of mold:

    A. Keep the shop clean and dry
    B. Ensure proper circulation of air in the shop
    C. Ensure that all areas are lighted
    D. Bake bread thoroughly and cool properly before storing it
    E. Always avoid handling the bread with wet or damp hands
    F. Ensure that bread is not kept for any length of time, since bread molds very quickly in storage (Pages 4-9 - 4-10)

17. The primary reason for using the short-time method of bread production is ***to save time.*** (Page 4-10)

18. Sweet doughs contain more ***sugar, shortening, and eggs*** than regular bread doughs. (Page 4-11)

19. The two types of sweet doughs are:

    A. Regular sweet dough
    B. Danish pastry (Page 4-11)

20. To "retard" dough, ***you refrigerate it.*** (Page 4-11)

21. Fat-soaked doughnuts are ***heavy and greasy tasting.*** (Page 4-11)

22. Before you coat a fried doughnut with sugar, ***you must first drain and cool it.*** (Page 4-11)

READING ASSIGNMENT #5

Pages 5-3 through 5-9

"Food Inspection"

OBJECTIVES

After completing this assignment, you should be able to:

1. State who must inspect foods to be procured for Armed Forces use.
2. State who must inspect foods after they are received by the Coast Guard to ensure that they are fit for human consumption.
3. Cite the manual which outlines inspection procedures for foods which are delivered directly to military food service establishments.
4. Cite two basic causes for rejection of foods by inspectors.
5. Describe the inspection standards for fish and shellfish.
6. Explain the minimum inspection standards for fruits and vegetables.
7. Cite the four areas of consideration when inspecting canned products.
8. Define "pinhole."
9. Define "sweller."
10. Define "springer."
11. Define "flipper."
12. Cite two food items which you should NOT reject simply because the container bulges.
13. Explain inspection standards for dry food items.
14. Cite inspection standards for butter, cheese, and eggs.
15. Cite inspection standards for milk and milk products.

16. Cite characteristics of the following spoiled/damaged food items:

a. Fish
b. Apples
c. Bananas
d. Cherries
e. Grapefruit
f. Grapes
g. Honeydew melons
h. Lemons
i. Oranges
j. Pineapples
k. Strawberries
l. Eggplants
m. Lettuce
n. Onions
o. Peppers
p. Potatoes
q. Canned corn
r. Canned peas
s. Canned meat products
t. Dried vegetables

FOOD INSPECTION

INTRODUCTION

All food maintained for use by military services must be wholesome and fit for human consumption. After being obtained from approved sources, it must then be transported, stored, prepared, displayed, and served so as to avoid contamination. Contamination could be through dust, insects, rodents, unclean equipment or utensils, unclean handlers, unnecessary handling, coughing, sneezing, flooding, draining, and overhead leakage or condensation.

Because of this possibility of contamination, the military services have very rigid food inspection regulations. The inspections are made by:

- Technically qualified personnel of the military veterinary services
- Defense Personnel Support Center quality assurance representatives
- U.S. Department of Agriculture (USDA) inspectors

At each individual CG unit, a medical department representative or another individual designated by the commanding officer is responsible for inspecting all foods to ensure that they were received from approved sources and are fit for human consumption. This medical department representative must maintain close communications with the military veterinary services (or preventive medicine technicians) to keep abreast of the latest inspection standards. Also, when this inspection is performed, the medical department representative must be accompanied by:

- The food service officer
- The food service manager

or

- Some other designated individual

If foods have not been inspected prior to receipt at a CG unit, they must be inspected at the unit according to procedures outlined in the Food Service Sanitation Manual (COMDTINST M6240.4). Fresh bakery items and fresh dairy products (other than milk and milk products) generally fall into this category.

Many times, common sense is the best factor involved in food inspection. Any food with a foul odor or a "strange" appearance should be rejected. Just remember that you NEVER TASTE SUSPECT FOODS.

As you take on more supervisory/managerial duties in CG dining facilities, you may often be required to inspect or assist in inspecting food items. This is a very important aspect of your job, since contaminated foods can cause extreme illness on a wide scale and, in some cases, can even cause death.

The following specific inspection information should be noted.

INSPECTION STANDARDS

MEATS AND POULTRY

The U.S. Department of Agriculture is responsible for Federal inspection of meat, meat products, poultry, and poultry products. All products of this type which are procured for CG use must be marked with the stamp of approval from that agency.

Some foods are inspected only at the state level. For this type inspection to be acceptable, it must afford health protection and safeguards to the consumer which at least equal those provided by the Federal systems.

FISH AND SHELLFISH

Each container of unshucked shell stock (shellfish, oysters, clams, mussels) procured for CG use must be identified by an attached tag that states the name of the original shell stock shipper, the kind and quantity of shell stock, and an official certificate number issued according to the law of the jurisdiction of its origin. Fresh and frozen shucked shellfish must be packed in nonreturnable packages identified with the name and address of the original shell stock shipper, shucker, packer, or repacker, and the official certificate number issued according to the law of the jurisdication of its origin. Shell stock and shucked shellfish must be kept in the container in which they were received until they are used.

Fish should be checked carefully. If fish has been frozen, thawed, and then refrozen, it must not be

used. Fish that has been refrozen has soft, flabby flesh, a sour odor, and an off color; the wrapping paper may be moist, slimy, or discolored; and the bottom of the box may be distorted.

Fresh fish have bright red gills, prominent clear eyes, and firm elastic flesh. Stale fish are dull in appearance, have cloudy and red-bordered eyes, and soft flesh. Finger impressions are made easily in stale fish and remain when pressure is released. Fish caught over the side of the ship must not be consumed unless there is absolute certainty that they are not poisonous. Cooking does not destroy the poisonous alkaloid in fish, and violent illness and even death may result.

Fresh crustaceans (lobsters and crabs) must be purchased as a live product. They will remain satisfactory as long as they are alive and the flesh is not shrunken. If they have been stored for long periods, however, the quality greatly decreases.

FRUITS AND VEGETABLES

The U.S. Department of Agriculture also sets the inspection standards for fresh fruits and vegetables. These standards establish only MINIMUM requirements.

Generally speaking, the following factors should be considered when inspecting all fruits:

- Appearance (absence of blemishes; these indicate poor quality or the beginning of decay)
- Size (larger fruit usually is more woody and coarse)
- Taste (this is the best indicator of quality)

Specific fruits should be inspected utilizing the following guidelines.

Apples

The best grades of apples are firm and have good color (bright and unspotted) and flavor. Immature apples have a poor color, lack flavor, and shrivel after storage. Overripe apples have a dull and extra-yellowish appearance. In advanced stages of overripeness, they wilt and begin to show decay. When apples have been severely injured by freezing or bruising, the skin appears brown and watersoaked and is often tough and leathery.

Bananas

The color and condition of the peel are good indications of the use that should be made of bananas. When the skin is all yellow, the banana is firm enough and ripe enough to be eaten. If the peel is yellow but flecked with brown, the banana is fully ripe and should be used immediately. Fruit with a moldy skin that has turned black is of poor quality, although some bananas with a dark skin are very ripe but still good.

Cantaloupes

There should be no trace of a stem at the blossom end of cantaloupes. If the netting covers the cantaloupe thickly and stands out like a whipcord, the melon is generally good. An apparent softness at the blossom end is no sure indication of maturity, since repeated pressure from handling will produce this condition. Fully ripe cantaloupes have a delicate aroma; an audible rattling of the seeds in a melon, when shaken, is another sign of maturity. The skin beneath the netting usually has a yellow tinge. Too deep a yellow indicates overripeness.

Cherries

High quality in cherries is denoted by plumpness, a bright appearance, and a good color. Immature cherries have a peculiar bitter tang, and are undesirable. Cherries should be inspected for worms. Several cherries in each container should be cut, because worm damage is not always apparent on the outside. Soft, overripe, or shriveled fruit should be rejected.

Grapefruits

Fine juicy grapefruits are well rounded in shape and heavy for their size. They are firm, but springy to the touch; not soft, wilted, or flabby. A coarse skin, puffiness, or sponginess indicates lack of juice and taste. Fruits decayed in any degree are not desirable. Usually the flavor is affected. Decay sometimes appears as a soft, discolored area on the peel at the stem or button end of the fruit. It may also appear as a watersoaked area, with much of the natural yellow color within the area being lost and the peel being so soft that it breaks easily when you press it with your finger.

Grapes

Color is a good guide to ripeness of grapes. The darker varieties should not have a green tinge; white grapes should have a decided amber coloring. The fruit should be plump, and each grape should be firmly fastened to the stem. Decay is indicated by wetness or the presence of mold.

Honeydew Melons

Prime quality honeydew melons have a thick, green-colored, sweet, fine-flavored flesh with a distinct pleasant aroma. The rind has a light-yellowish color and yields slightly to pressure. Decay is generally indicated by mold or dark, sunken, watery areas.

Lemons

The best lemons have a greenish-yellow color with a smooth, fine-textured skin, and are heavy for their size. Mold or soft spots at the ends indicate decay. If they are too springy, they may be decayed in the center.

Nectarines

Nectarines look and taste like small peaches, but they do not have "peach fuzz." They are red, white, or yellow fleshed in color and are chosen for their plumpness and firmess. Overripeness is indicated by a darker color and a softness of the fruit.

Oranges

The skins of good oranges should be yellowish-orange, smooth, and fine textured. Avoid those that have badly creased skins or a puffy, spongy condition and are light in weight for their size. When inspecting for quality, be sure that the crate does not contain decayed fruit.

Peaches

Quality in peaches is indicated by the general appearance and firmess of the flesh. They should be smooth skinned and well filled out. The color on the underside should be creamy white or yellow, blushed with red. Overripeness is indicated by deeper reddish-brown color and softness of the fruit.

Pears

Good quality pears are firm and shiny. Pears are packed and shipped green because they develop a fine flavor and smoother texture when ripened off the tree. They should be fully ripe for fresh use. If they are hard and unyielding to the touch at the time of receipt, allow them to stand at room temperature until the flesh responds readily to a gentle pressure of the hand. They are then in prime condition for eating.

Pineapples

Fully ripe pineapples are slightly soft to the touch, golden yellow in color, and have a "piney" aroma. Fruit that is too green may not ripen well. Overmaturity is shown by slight decay at the base or on the sides by dark, soft, water spots.

Plums

Good plums should be full colored and soft enough to yield to slight pressure. Some varieties are fully ripe when the color is yellowish-green; others are ripe when the color is purplish-blue or black. If hard or poor in color and flavor, the fruit is immature. Overripe fruit is soft and usually leaky.

Strawberries

Quality in strawberries is indicated by the general appearance. They should be firm, plump, and bright red in color. Overripe strawberries are leaky, dull in color, and should not be used. Mold at the surface indicates decay.

Tangerines

Tangerines are small, yellowish-red oranges with easily removable skins and loosely adhering sections. Quality is based mainly on weight for size and deep-yellow or orange color of the skin.

Watermelons

A fully ripe watermelon has a thin outer skin that peels easily when scraped with the fingernail. The underside changes from white to a yellow tinge with maturity. The best way to determine watermelon quality is by "plugging."

Because of the high perishability of fresh vegetables, they must not be pinched, squeezed, or otherwise handled unnecessarily. Specific vegetables should be inspected utilizing the following guidelines.

107

Asparagus

Asparagus stalks should be straight, fresh appearing, crisp, and tender with compact pointed ends and only one inch or so of tough woody base to remove.

Beans

Green or waxy yellow (wax-beans) beans should have long, straight pods and be crisp enough to snap easily. When the beans start to ridge and bulge the pods, they usually are old, tough, and leathery.

Beets

Beets should be globular shaped with smooth, firm flesh. Medium-sized beets are less likely to be tough than very large ones.

Broccoli

Broccoli should have plenty of green color in the heads as well as in the leaves and stems. Stalks should be tender and firm with compact, dark-green or purplish-green buds in the head.

Brussel Sprouts

Good brussel sprouts are hard, compact, and of an attractive green color. Puffiness, a wilted appearance, or yellow color indicate poor quality.

Cabbage

Well-trimmed, solid heads which are heavy for their size and show no discolored veins are usually of good quality.

Carrots

Carrots should be bright-colored, well-shaped, and medium-sized. Poor color in carrots indicates poor quality. Wilted, flabby, soft, or shriveled carrots lack flavor.

Cauliflower

A jacket of bright green denotes freshness. The head should be white or creamy white, clean, and solidly formed. If the flower clusters are spread or open, the vegetable is of poor quality.

Celery

Quality characteristics for both the bleached and the green celery are the same. Leaf stems or stalks should be brittle enough to snap easily and be of medium length and thickness. The inside of the stem should be smooth. If it feels rough or puffy to the touch, the celery is likely to be pithy.

Corn

Corn may be either white or yellow. The husk is a fresh green color, while the kernels are tender, milky, and sufficiently large to leave no space between the rows. Ears generally should be filled to the tips, with no rows of missing kernels.

Cucumbers

The best cucumbers are firm in texture and bright in color. Cucumbers of less than seven inches in length and about two inches in diameter are best. Overmaturity is indicated by a generally overgrown puffy appearance. The color of overmature cucumbers is generally dull and not infrequently yellow; the flesh is tough; seeds are hard; and the flesh in the seed cavity is almost jelly-like.

Eggplant

Purple eggplant should be of a clear, dark, glossy color that covers the entire surface. Heaviness and firmness of flesh are important. Choose pear-shaped eggplants from 3 to 6 inches in diameter. Decay shows up in dark brown spots. Wilted, soft, or flabby eggplants should be discarded.

Endive

Curly endive grows in a bunched head with narrow, ragged-edged leaves which curl at the ends. The center of the head is a yellowish-white and has a mild taste, while the dark green outer leaves have a bitter taste. Tough, coarse-leaved plants and undesirable. Toughness can be determined by breaking or twisting a leaf.

Escarole

Escarole is a variety of endive. The leaves are broad and do not curl at the end. Crispness, freshness, and tenderness are the essential factors of quality.

Greens

Collards, kale, mustard, spinach, and turnip tops are the greens authorized for use in enlisted dining facilities. Good quality greens must be fresh, young, green, and tender. Poorly developed, dry, or yellow leaves or insect-eaten leaves are not good. Coarse stems indicate poor quality.

Lettuce

"Iceburg" lettuce is tightly headed lettuce, medium green on the outside with a very pale green heart. Discolored areas on the leaves indicate decay. Soft rot sometimes penetrates to the center of the head.

Onions

Spanish and American types of onions, both grown in the United States, are used by the military. Dry onions should be bright, clean,hard, well-shaped, and dark-skinned. Moisture around the neck indicates decay.

Onions, green

Green onions should be fresh in appearance, should have fresh green tops and medium-sized necks which are blanched for at least 2 or 3 inches from the root. They should be young, crisp, and tender. Bruised, yellow, wilted tops indicate poor quality. The condition of the necks can be ascertained by puncturing them with your thumbnail and twisting them.

Parsnips

Young parsnips, 1 1/2 to 2 inches thick and free from rust spots, are the best. Withered parsnips are old, tough, and have a strong flavor.

Peppers

Peppers should be well-shaped, thick-walled, and firm, with a uniform glossy color. Pale color and soft seeds are signs of immaturity. Sunken, blister-like spots on the surface indicate that decay may set in rather quickly.

Potatoes

Good quality white potatoes are generally clean, firm, and free from cuts, growth cracks, and other knobs or surface defects. Frost damaged potatoes generally have a watery appearance or show a black ring near the surface when cut across.

Sweet Potatoes

Thick, chunky, medium-sized sweet potatoes which taper toward the end are the best. Avoid those with any sign of decay, since such deterioration spreads rapidly, affecting the taste of the entire potato.

Radishes

Good quality is indicated by a root which is smooth, crisp, and firm, never soft or spongy.

Rhubarb

Fresh, large, crisp, straight stalks having a red or cherry-color are best. Condition of the leaves is a reliable guide in judging the freshness.

Rutabagas

Good quality rutabagas should be smooth-skinned, firm, and heavy for their size.

Squash

There are several varieties of squash. Buttercup, zucchini, and yellow should NOT have hard rinds; hard, tough rinds are desirable, however, on acorn-shaped and hubbard. Buttercup squash should be somewhat drum-like, with sides slightly tapered near the apex; zucchini should be cylindrical, straight, and have fairly square ends with a moderately dark-green color; yellow squash should be a very brilliant light yellow color; acorn should be very dull, with a blackish-green exterior and a dull orange interior; the best hubbard squash is medium to large size.

Tomatoes

Tomatoes should be firm, plump, fairly well-formed, of good color (green out of season and bright red in season), and free from blemishes. The tomato is one of the most tender products and must be handled with care. Misshapen, angular, ribbed, or scarred tomatoes are of poor quality.

Turnips

Smooth skin, firmness, and heavy for size are indications of good quality.

CANNED PRODUCTS

There are four factors to consider when inspecting canned products. They are:

- Labels
- Contents
- Can exterior
- Can interior

Labels

The information stamped on the end of each can must be checked to insure that contents and date of pack are indicated.

Contents

Odor and taste indicate the condition of food. Fading of color, loss of flavor, and softening of contents are due to chemical action and natural aging processes. Discoloration is another defect caused by a chemical action found usually in products containing sulphur compounds, such as corn, peas, and meat products.

Can Exterior

The exterior of the can must be examined for general appearance, dents, swelling, rust, and pinholes. Dents, unless so severe as to cause leakage, do not indicate that the contents are in an unsatisfactory conditon. Rust does not injure the food unless it penetrates the can. Pinholes are tiny holes in cans which are caused by the action of acid. They are found only by careful inspection. Cans with pinholes must be surveyed.

If both ends of a can bulge out and remain that way, it is a "sweller." This condition is caused by bacterial action in the foods. The bacterial action results in the freeing of a gas (hydrogen sulfide). Since the gas cannot escape, it makes room by bulging out the ends of the can. "Swellers" must be surveyed.

"Springers" are cans which also have bulged ends; however, they yield to pressure from the fingers or thumbs. When the pressure is relieved, the ends bulge out again. This condition may be caused by overfilling the can or by chemical or bacterial action on the food. This causes a freeing of gas which bulges the can. "Springers" must also be surveyed.

"Flippers" are cans which have flat ends; however, one end may be forced into a convex condition when the other end of the can is rapped sharply on a flat surface. This condition indicates a loss of vacuum in the can from formulation of gas by bacterial or chemical action on the metal of the can. Regardless of the cause, the contents must NOT be used.

EXCEPTIONS: Cans of molasses that bulge at the ends are not unusual, particularly in tropical climates. This bulging condition is normal, and the cans should not be rejected; microorganisms cannot exist in such a high sugar environment.

Cans of coffee may also bulge. "Swellers" that develop in coffee are usually an indication of a properly sealed container that has retained its natural gases. The gas expands, replacing the original vacuum created in the can. If you suspect a faulty can of coffee, you should report it to the FSO.

Can Interior

The contents must be removed and the inside of a sample can checked very carefully. It may be necessary to rinse the can thoroughly and then refill it with water to detect very small pinholes.

DRY FOOD ITEMS

Since dry food items are packaged under standards established by the USDA, CG inspection should be concerned with the outward appearance of the foods or containers and the condition of the food itself. One of the primary problems with dry food items is infestation by insects and rodents. If bags of items such as flour and meal are broken, chances are that the food is contaminated. Dockside inspection of items such as bags of potatoes, bags of onions, and boxes should be made. This is because insects such as cockroaches are regularly transported from one area to another in these containers.

Check dried vegetables for dampness and mold.

BUTTER, CHEESE, AND EGGS

These items spoil quickly if they are not stored properly. It is, therefore, important that inspections be made upon delivery and also frequently during the storage period.

Butter

Butter should be received in clean, unbroken cases. For quality, it is best to taste samples for sweetness and freshness. The color should be uniform and the texture firm. Specks or foreign substances should not be present.

Cheese

The rind, color, flavor, and texture of cheese should be checked. Cheese may be received in either natural or processed forms. The rind should be clean and free from mold or wrinkles. The color should be evenly distributed through good cheddar cheese. This can be determined by holding a thin slice in front of a light. The flavor of good cheese is clean and "nutty," and the texture is compact and solid. The surface of the cheese should not contain breaks or holes.

Eggs

Only fresh, frozen, and dehydrated eggs are to be procured to meet the various conditions, temperatures, and uses. Fresh eggs, not over 30 days old, which have been held at a temperature of 32°F. in a dry, ventilated place are preferred. Fresh eggs must be clean, have the shell intact, and have no cracks. Eggs stored at room temperature or allowed to remain at room temperature, rapidly lose their quality. Fresh processed eggs have been preserved by dipping them either in hot mineral oil at 200°F. for six seconds or by treating them with other processing fluids. This treatment helps retard shrinkage due to evaporation and also destroys molds and bacteria, thereby prolonging the storage life of the eggs. Processed eggs should also be stored in a cool (32° F.), dry, ventilated area. Both dehydrated eggs and frozen eggs, which must be thawed before use, are used for making scrambled eggs and omelets or for baking purposes.

MILK AND MILK PRODUCTS

Food inspectors need to be concerned primarily with ensuring that recommended temperatures are maintained in storage and dispensing areas for these products. They also need to ensure that approved sanitary methods are utilized in handling them.

When performing delivery inspections, medical department and supply personnel must ensure that milk and milk products are from an approved source and are delivered in containers which are in good condition and are properly sealed. Temperature of these products upon delivery must be NO MORE THAN 45° F.

Vehicles used in transporting milk in its final delivery containers must be constructed with permanent tops and sides and must be clean.

The use of block or crushed ice on top of milk containers for refrigeration or cooling during delivery or when on the serving line is prohibited.

FINAL CAUTION

All food items that are considered abnormal in appearance or odor must NEVER be EATEN or even TASTED. They must be discarded according to survey procedures outlined in the Subisistence Support Manual (COMDTINST M4061.3). Where large quantities are involved, a representative package must be submitted to a laboratory for bacteriological analysis.

111

SELF-QUIZ #5

1. Who inspects all foods procured by the Armed Forces dining facilities?

   A. _____
   B. _____
   C. _____

2. After food is received at an individual unit, by whom is it inspected to ensure that it is fit for human consumption? _____

3. What CG manual should you consult for inspection procedures? _____

4. Cite the two "common-sense" causes for rejecting food items.

   A. _____
   B. _____

5. If fish has been frozen, thawed, and then refrozen, what characteristics does it have?

   A. _____
   B. _____
   C. _____
   D. _____
   E. _____

6. What are the characteristics of good fresh fish?

   A. _____
   B. _____
   C. _____

7. What is the primary requisite for purchasing fresh crustaceans? _____

8. What three factors should be considered when you inspect fruits?

   A. _____
   B. _____
   C. _____

9. When you inspect fresh vegetables, you should not _____ or _____ them.

10. What four factors must be considered when inspecting canned products?

    A. _____
    B. _____
    C. _____
    D. _____

SELF-QUIZ #5 *(Continued)*

11. Match the terms in Column A with the appropriate characteristics in Column B.

A	B
Sweller	Ends of can bulge, but yield to pressure
Springer	Cans have tiny holes
Flipper	Ends of can may be forced into a convex condition
Pinhole	Both ends of the can bulge

12. Cite two food items you should NOT reject simply because the container bulges.

A. _____
B. _____

13. What are the two major contamination problems for dry food items?

A. _____
B. _____

14. What is the purpose of dockside inspections of bags of potatoes and onions? _____

15. Match the product in Column A with its inspection quality in Column B.

A	B
Butter	No breaks or holes in surface
Eggs	Not be more than 30 days old
Cheese	No specks or other foreign substances

16. For inspection of milk and milk products, what is the primary factor for consideration? _____

17. How can you tell if canned corn is "bad"? _____

ANSWERS TO SELF-QUIZ #5

1. All foods procured by the Armed Forces dining facilities are inspected by (A) the ***U.S. Department of Agriculture***, (B) the ***Defense Personnel Support Center***, and (C) the ***military veterinary services.*** (Page 5-3)

2. After food is received at an individual unit, it is inspected by ***a medical department representative or another designated official*** to ensure that it is fit for human consumption. (Page 5-3)

3. You should consult the ***Food Service Sanitation Manual (COMDTINST M6240.4)*** for inspection procedures. (Page 5-3)

4. The two "common-sense" causes for rejecting food items are:

   A. Foul odor
   B. Unnatural appearance (Page 5-3)

5. If fish has been frozen, thawed, and then refrozen, it will have the following characteristics:

   A. Soft flesh
   B. Flabby flesh
   C. Sour odor
   D. Off color
   E. Moist, slimy, or discolored wrappings (Page 5-4)

6. Good fresh fish should have:

   A. Bright red gills
   B. Prominent clear eyes
   C. Firm elastic flesh (Page 5-4)

7. When crustaceans are purchased, ***they must be alive.*** (Page 5-4)

8. When you inspect fruit, consider the following factors:

   A. Appearance
   B. Size
   C. Taste (Page 5-4)

9. When you inspect fresh vegetables, you should not ***pinch or squeeze them.*** (Page 5-5)

10. When inspecting canned products, you should consider the following factors:

    A. Labels
    B. Contents
    C. Can exterior
    D. Can interior (Page 5-8)

11. Sweller - Both ends of the can bulge
    Springer - Ends of can bulge, but yield to pressure
    Flipper - Ends of can may be forced into a convex condition
    Pinhole - Cans have tiny holes (Page 5-8)

ANSWERS TO SELF-QUIZ #5 *(Continued)*

12. The two food items that you should NOT reject simply because the container bulges are (A) ***molasses*** and (B) ***coffee***. (Page 5-8)

13. The two major contamination problems for dry food items are (A) ***insects*** and (B) ***rodents***. (Page 5-8)

14. Dockside inspections of bags of potatoes and onions are to ***check for infestation of insects such as cockroaches***. (Page 5-8)

15. Butter - No specks or other foreign substances
    Eggs - Not be more than 30 days old
    Cheese - No breaks or holes in surface (Page 5-9)

16. The primary factor for consideration when inspecting milk and milk products is the ***temperature***. (Page 5-9)

17. Canned corn should be considered "bad" if ***it is discolored***. (Page 5-8)

READING ASSIGNMENT #6

Pages 6-3 through 6-14

"Food Storage"

OBJECTIVES

After completing this assignment, you should be able to:

1. Describe a typical storage area for dry food items.
2. Explain why you should not smoke in storage areas.
3. Cite the three important climatic conditions to be considered in the proper storage of fresh and frozen foods.
4. Explain the necessity for stock rotation in storage areas.
5. Explain why certain fresh foods should not be stored near butter or eggs.
6. Explain why adequate air circulation is a necessity in areas where fresh and frozen foods are stored.
7. Explain how you should INITIALLY store slightly thawed frozen perishables when they are delivered.
8. Explain how to use storage life tables for food items.
9. Define "semiperishable food."
10. Explain storage procedures for the following prepared food items:
    a. Commercially-prepared fruit juices
    b. Commercially-prepared salad dressings
    c. Cut, sliced, or diced meats
11. Explain storage rules for prepared foods on display for service.

FOOD STORAGE

INTRODUCTION TO BULK STORAGE OF FOOD ITEMS

All areas in which food items are handled, processed, or stored must be kept clean and sanitary. There should also be no unnecessary traffic. Care must be taken to keep food items away from areas where asphalt, fuel, creosote, paint, or lubricating oils are present. Since smoking in food storage spaces presents a potential fire hazard, and since certain foods absorb the odor of smoke, smoking in food storage areas in PROHIBITED.

If possible, there should be no steam or other heated pipes in storage areas. If there are, they should be well insulated to keep heat away from the stored food items. If storage areas must be painted, a quick-drying, odor-free paint must be used. This is so that food items will not absorb paint odors. If possible, pallets should be used in food storage areas. This facilitates cleaning and permits adequate ventilation/refrigeration. Also, all items should be marked and so arranged in these areas that the oldest items or those subject to rapid deterioration are used first.

If food items are to be stored in other than normal facilities, the primary consideration should be temperature. Severe deviations from normal storage temperatures rapidly cause deterioration of food products.

SPECIAL CONSIDERATIONS

Under normal conditions, food items must be stored in their original containers. If items are received in damaged containers or bags, they should be issued immediately, provided they are fit for human consumption; otherwise, they must be surveyed. If there is any doubt about the fitness of food for human consumption, the item in question must be inspected by medical representatives and the appropriate veterinary personnel (if available); if the items are found unfit, they must be surveyed promptly.

Just remember that correct storage procedures play a major part in preventing food-borne illness. Maintaining proper temperatures, air circulation, and humidity is necessary to preserve food and prevent spoilage.

SECURITY

During receiving and storing operations, precautions must always be exercised to prevent pilferage, damage, or loss. This not only includes locking storage spaces, but it also includes securing items in units afloat to prevent shifting.

STORAGE INCOMPATABILITIES

Some fresh food items are not compatable for storage with certain other foods. For instance, butter and eggs readily absorb odors and taste of such foods as citrus fruits, onions, tomatoes, cabbage, cantaloupes, and celery.

Odors of some non-food items, such as creosote, kerosene, and turpentine readily transfer to food items packed in bags, ventilated crates, and cloth or paper packages.

STORAGE LIFE

Storage life is the elapsed time from date of pack to date of issue for consumption. This is based on the assumption that food products delivered to the government were processed and procured according to required specifications and were in good condition at the time of delivery.

VENTILATION

Proper ventilation (air circulation) is one of the primary requirements for adequate food storage. Often, the use of a fan or duct system is helpful in maintaining good circulation in storage areas.

Storerooms containing fresh fruits and vegetables do not usually require outside air, but when the compartment is kept tightly closed and the temperatures are 40° F. or higher, the carbon dioxide given off by the fruits and vegetables can sometimes reach an unacceptably high level, thus decreasing the supply of oxygen. If this condition occurs, a supply of fresh air must be admitted into the area before personnel are allowed to work there.

TEMPERATURE

Another of the primary requirements for adequate food storage is maintaining proper temperatures. Since excessive heat can cause rapid deterioration of many food products, refrigeration is often

required. To maintain proper temperature control, refrigerator units must be cleaned and defrosted quite frequently. They must also be checked for air leaks, faulty doors, and other defects.

Overloading refrigerated storage spaces decreases the efficiency of the cooling equipment, makes cleaning more difficult, and leads to other sanitation problems. Stocking should start at least four inches in from the bulkheads or coils and work inward toward the center.

NOTE: Ice not intended for human consumption must NOT be used to cool stored foods, food containers, or food utensils. You must NEVER store beer or soda bottles/cans or thermos containers in ice machines.

Frozen Perishables

When quick-frozen fruits and vegetables are delivered, they must be transferred to low temperature storage spaces. If possible, check the temperature of the load. If the temperature of the product is higher than that in the storage area, scatter the shipping cases loosely around the area until everything is adequately cool. Storage temperatures for these items MUST NOT EXCEED 0° F. During shipment, the temperature MUST NOT EXCEED 10° F. If frozen perishables have less than three months' storage life remaining, they must NOT be stored for shipment to overseas areas. If they have three to six months' storage life left, they must be inspected prior to shipment overseas to ensure sufficient storage life remains to permit routine issue within overseas areas. (See sample Storage Life Table 6-1.)

Chilled Perishable Foods

Generally, chilled perishable food items should be stored in a temperature range of 32° - 35° F. For some items, however, better quality is maintained at temperatures higher or lower than this. Also, some items are damaged by slow freezing. Table 6-2 provides the (1) freezing point, (2) best storage temperature, and (3) storage life of some food items commonly procured for use in CG dining facilities.

Table 6-1 - Approximate Storage of Frozen, Perishable Food Items at 0° F. or Below

Product	Months
MEAT, POULTRY, AND FISH	
BACON: precooked, pkg	9
slab	12
sliced, vacuum-packed	4-1/2
sliced, bulk shingle	2-1/4
sliced, re-formed slab	6
BEEF: Boneless, chuck short ribs, oven, pot and round roasts	10
Boneless, formed grill or Swiss steaks	6
corned	6
diced	8
dried	12
ground, bulk	4
patties	3
rib, round or tenderloin[1]	10
liver	12
liver, sliced	10
BOLOGNA: Lebanon	8
60% beef/40% pork	3
75% beef/25% pork	6
sliced[4]	1-2
CANADIAN-STYLE BACON	6
CHICKEN: RTC, cut up or quartered	8
RTC, whole	10
breast, leg or thigh	8
gizzard	3
CHITTERLINGS: precooked or raw	3
PORK: diced; roast, loin, boneless; boneless slices or spareribs	4
sausage, bulk	3
sausage, links, domestic	2
sausage, links, export	3
RABBIT, RTC, cut up	5
ROCK CORNISH HEN, RTC, whole	8
SALAMI: cooked	3
cooked, sliced[4]	1-2
SCALLOPS	8
SCRAPPLE	6
SHRIMP: raw, breaded or molded breaded, raw, peeled or unpeeled[3]	8
THURINGER	3
TURKEY: boneless, cooked	9
boneless, raw	8
gizzard	3
RTC, whole	10
VEAL, boneless, 3-way	6
SPECIALTY SAUSAGE	
BOCKWURST, BRATWURST AND KNOCKWURST, all beef	6
ITALIAN, Hot or Sweet, all pork	2
POLISH, all pork	3
DAIRY FOOD AND EGGS	
BUTTER: prints, bulk, RTS, patties	12
CREAM CHEESE, pkg	6
EGG: whole, bakery or table-type	9
white	12

Table 6-1 - Approximate Storage of Frozen, Perishable Food Items at 0° F. or Below (Continued)

CLAMS, shucked	9
CRAWFISH, TAIL (lobster tail)	8
DUCK, RTC, whole	10
FISH: breaded portions or sticks, fillets or steaks, all species	6
FRANKFURTERS: bag, type III, export	12
bag, type II, domestic	6
box, type II, domestic	2-1/2
HAM: cooked, boneless	6
and cheese, sliced[4]	1-2
pressed, sliced[4]	1-2
LAMB: boneless, chops	6
boneless, roast	3
LIVER SAUSAGE	3
LOBSTER, whole, frozen[2]	3-5
LUNCHEON LOAF:	3
pickle and pepper, sliced[4]	1-2
pickle & pimiento, sliced[4]	1-2
OYSTERS, shucked, eastern or gulf, IQF, or Pacific	9
PASTRAMI, precooked, slab	6
PEPPERONI, dry	5
PIGS FEET	6
PORK: butt, Boston; ham, boneless or loin bladeless; country-style ribs or tenderloin, and beef sausage, links; hocks (ham hocks) fresh	6
PIZZA CRUST	6
PIES: fruit-filled (procured frozen)	18
cream-filled (procured frozen)	6
TORTILLAS: corn or wheat flour	18
WAFFLES, brown and serve	6
FOOD SPECIALTY PREPARATIONS	
BURRITOS, prepared	3
EGG ROLLS	3
ENCHILADAS, beef or cheese w/sauce	3
MANICOTTI, cheese or meat w/o sauce	6
ICE CREAM: bar, cone preformed or sandwich	3
bulk or sherbets	9
FRUITS AND VEGETABLES	
FRUITS: blackberries, blueberries, boysenberries and peaches	18
strawberries	15
cherries and raspberries	24
JUICES: fruit: lemon, concentrate and lime, single strength	18
fruit concentrate: grape, grapefruit or orange	24
VEGETABLES: asparagus, beans, green or wax, french-style, broccoli, brussels sprouts, cauliflower, mixed vegetables, potatoes, french fries, diced and shredded (hash brown), sweet peppers, diced and whole, succotash, onion rings raw, breaded	12
okra	18
beans, lima, greens, peas and carrots, spinach	14
carrots slices, corn and summer squash	24
BAKERY AND CEREAL PRODUCTS	
BREAD: procured frozen	6
CAKE: loaf or round	12
PIZZA, prepared	6
RAVIOLI, cheese or meat w/o sauce	6
TAMALES, beef, prepared	3
TOPPING, dessert and bakery	24
COMPOSITE FOOD PACKETS	
Meal, Flight, beef burgundy, beef sirloin steak, french-fried shrimp, ham w/egg, or omelet w/meat entree, roast turkey, salisbury or Swiss steak[5]	6

[1] Store compactly.

[2] Whole lobster procured commercially frozen in the shell and wrapped in polyethylene bags: Keep at 0° F., or below. DO NOT ALLOW TO THAW BEFORE COOKING.

[3] Shrimp is extremely susceptible to deterioration at temperatures above 0° F. At 14° to 18° F., quality can be maintained for only 30 days.

[4] Individual sliced packages of luncheon meats are procured as commercially packaged chilled items. To minimize rancidity, items should be stowed only in freeze spaces.

[5] The meals may be used for up to 9 months after date of pack provided that the surveillance inspections at 30-day intervals, subsequent to the 6-month period, indicate that the product is safe for human consumption. Each case of meals is equipped with a thaw/refreeze indicator. Any evidence that the meal has thawed is sufficient reason for discarding.

Table 6-2 - Freezing Point (F°), Storage Temperature (F°), and Approximate Storage Life of Chilled, Perishable Food Items

Product	Freezing point	Best storage temperature	Storage life
MEAT, POULTRY, AND FISH			
Bacon, slab	–	32-35	2½ months
Bologna, Lebanon	–	32-35	2 months
50% beef/50% pork	–	32-35	12 days
Frankfurters, 50% beef/ 50% pork	–	32-35	2 weeks
Ham, boned, whole, pear, or pullman-shaped	–	32-35	9 months
Liver sausage or luncheon loaf	–	32-35	2 weeks
Lobster, whole, fresh[1]	–	32-35	See Note 1.
Pepperoni, dry	–	32-35	4 weeks
Pork sausage, links	–	32-35	3 weeks
Salami, cooked, or Thuringer	–	32-35	2 weeks
DAIRY FOODS AND EGGS			
Buttermilk	31	32-35	2 weeks
Cheese: American, processed, loaf	16	32-35	8 months
American, processed, slices	–	32-35	6 months
blue-veined, natural	–	32-35	4½ months
cheddar, natural	–	32-35	12 months
cottage[2]	30	32-35	2 weeks
cream, pg	–	32-35	2 months
mozzarella, natural	–	35	4 weeks
pimiento, processed, slices	–	32-35	6 months
pizza blend, cn	–	32-45	6 months
provolone, natural	31	35	
Swiss, natural, sandwich	–	32-35	6 months
Swiss, natural, block	–	32-35	12 months
American & Swiss processed	16	32-35	8 months
Food, American, processed	16	32-35	6 months
Cream, table, or whipping	31	32-35	10 days
sour	31	32-35	2 weeks
UHTASP, whipping	31	35-50	6 months
Eggs, shell, medium or large, fresh, domestic	27	32	4 months
shell, medium or large processed, export	27	32	6 months
Eggnog, milk fat, or vegetable fat	–	32-35	7 days
ultra high temperature	–	40-45	3 months
homogenized	–	40-45	12 days
UHTASP	–	32-35	6 months
DAIRY FOODS AND EGGS (Cont'd)			
Flavored dairy drink, chocolate	29	32-35	1 week
dairy drink, UHTASP, chocolate[3]	29	32-35	6 months
milk, chocolate	29	32-35	7 days
half and half	31	32-35	7 days
Ice Milk Mix, fresh, liquid, chocolate, or vanilla	31	40-45	12 days
Milk, homogenized, fresh, filled, or recombined	30	32-35	7 days
Milk, lowfat, or skim	32	32-35	10 days
white, UHTASP[3]	29	32-35	6 months
Milk Shake Mix, fresh, liquid chocolate or vanilla	31	40-45	12 days
Yogurt, plain, or fruit flavor	30	40-45	30 days
FRUITS AND VEGETABLES			
Apples, cooking or eating		See chart following footnotes.	
Apricots	30	32	7-14 days
Asparagus[4], spinach, squash, summer	31	32	10 days
Avocados, rough-skin, Calif., varieties	31	55	2 weeks
Avocados, smooth-skin, Florida, varieties	31	40-45	4 weeks
Bananas, green[5]	31	56-58	7-10 days
Bananas, ripe, unwrapped[5]	–	56-58	2-4 days
Bananas, ripe, plastic-wrapped	–	40	7 days
Cabbage, Danish	31	32-40	6 weeks
Cabbage, red	32	32-40	4 weeks
Cabbage, shredded	31	32-35	7 days
Cantaloupes[6]	30	32-34	10 days
Carrots, slices, table-ready	30	32-35	10 days
Carrots[7]	30	32	4½ months
Casaba melons	30	40-45	4 weeks
Cauliflower	31	32	3 weeks
Celery[8]	31	32	3 months
Cherries, sweet[9]	29	32	12 days
Collards, corn, fresh, on-the cob, parsley	31	32	7 days
Cranberries	30	36-40	6 weeks
Cranberry sauce, pg	–	50	6 months
Cucumbers	31	45-50	2 weeks
Dates	5	32	6 months

Table 6-2 - Freezing Point (F°), Storage Temperature (F°), and Approximate Storage Life of Chilled, Perishable Food Items (Continued)

Product	Freezing point	Best storage temperature	Storage life
FRUITS AND VEGETABLES (Cont'd)			
Eggplant, Persian melons[6]	31	45-50	10 days
Endive, escarole, kale, radishes, red-topped	31	32	2 weeks
Garlic, dry	30	32	7 months
Grapefruit[10]	30	50	4 weeks
Grapes, sawdust pack, export	29	30-31	6 weeks
Grapes	29	30-31	4 weeks
Honeyball melons	30	45-50	3 weeks
Honeydew melons	30	45	3 weeks
Juice, lemon, reconstituted	31	50	4 months
Lemons	30	55	2 months
Lettuce[11]	31	32	3 weeks
Lettuce, table-ready, chopped	31.2	32	6 days
Lettuce, table-ready, whole head	31.2	31.2-32	6 days
Limes	29	48-50	2 months
Nectarines, peaches, plums	30	32	2 weeks
Onions, dry, peeled, domestic	30	32	6 days
Onions, dry, cooking, globe[12]	31	32	6 months
Onions, dry, Bermuda or Spanish	31	32	6 weeks
Onions, green, or radishes, whole, table-ready[12]	31	32	6 days
Onions, green[12]	31	32	12 days
Oranges, Calif., varieties	30	40-44	7 weeks
Oranges, temple	30	38	10 days
Oranges, Florida varieties	30	32-35	2 months
Parsnips, rutabagas	30	32	3 months
Pears	See chart following footnotes.		
Peppers, sweet	31	45-50	9 days
Pineapple	30	45	2 weeks
Potatoes, sweet[13]	30	55-60	4 months
Potatoes, white, fresh harvest, french-style, or whole peeled	30	35	7 days
Potatoes, white, storage crop	–	40	2 months
Radishes, fresh, table-ready	–	50	3 months
Romaine	32	32	10-12 days
Squash, fall and winter	30	32	2 weeks
Strawberries	31	50-55	4 months
		32	5 days
FRUITS AND VEGETABLES (Cont'd)			
Tangelos	29	32-38	3 weeks
Tangerines	30	31-38	2 weeks
Tomatoes[6, 14]	31	55	See footnotes.
Tomatoes, cherry	31	50	8 days
Turnips	30	32	4 months
Watermelons	31	36-40	2 weeks
BAKERY AND CEREAL PRODUCTS			
Bread: marble, part whole wheat, pumpernickel, raisin, rye, French, Vienna, white, sliced[15]	–	75-90	7-10 days
Cake, coffee	–	60	5 days
Cake, layer	–	35	7 days
Cake, loaf	–	35	10 days
Cookie dough, chocolate, raisin, or sugar	–	32	6 months
Doughnuts, all flavors	–	60	3 days
Fruitcake	–	40	10 months
Pie, fruit-filled, or fried	–	35	3 days
Rolls: bagel[15]	–	70	1 day
English[15]	–	70	7 days
finger or sweet[15]	–	70	2 days
bread, French, pan, rusk, dinner, muffin, parker-house, sandwich[15]	–	75-90	7-10 days
brown-and-serve	–	32	3 weeks
SUGAR, CONFECTIONERY AND NUTS			
Honey, boat, cup/pouch	–	50	6 months
Nuts, mixed, unshelled	20-24	32-40	12 months
Syrup, imitation, maple, boat, cup/pouch	–	50	12 months
JAMS, JELLIES, AND PRESERVES			
Jam or Jelly, all flavors, boat-type	–	50	6 months
Jam or Jelly, all flavors, cup-type	–	50	12 months
Peanut Butter, boat-type	–	50	6 months
Peanut Butter, cup-type	–	50	12 months
FOOD OILS AND FATS			
Shortening Compound, carton or cube	–	32-35	5 years

Table 6-2 - Freezing Point (F°), Storage Temperature (F°), and Approximate Storage Life of Chilled, Perishable Food Items (Continued)

Product	Freezing point	Best storage temperature	Storage life
CONDIMENTS AND RELATED PRODUCTS			
Catsup, tomato, or mustard prepared boat-type	–	50	6 months
Catsup, tomato, or mustard prepared cup or pouch	–	50	12 months
Horseradish, prepared	–	32	3 months
CONDIMENTS AND RELATED PRODUCTS (Cont'd)			
Relish, pickle, sweet, boat-type	–	–	6 months
Relish, pickle, sweet, cup or pouch	–	–	12 months
Salad Dressing, boat, cup or pouch	–	50	3 months
Yeast, bakers, active-dry	–	32	6 months

1 Fresh whole lobster should be procured only as a live product. It will remain in satisfactory condition only as long as it is kept alive and the flesh is not shrunken. DO NOT FREEZE.

2 Do not freeze.

3 If this item is held for periods of 3 months or less, it may be stored at temperatures below 72°F. Chill storage will extend storage life. Product is not to be frozen.

4 Asparagus held too long at 32°F. is subject to chill injury. The butts of asparagus should be placed in dry absorbent material during storage.

5 Full-ripe bananas may be held at 40°F. for several days with only slight discoloration of the peel and without any flavor change. Full-ripe bananas wrapped in cellophane or plastic bags should be stored at 40°F. Wrapped bananas, when held at room temperature, will turn brown and spoil more quickly than unwrapped bananas.

6 Damage will result if item is stored at lower temperature than indicated.

7 Carrots may become bitter if stored with fruits which give off ethylene, such as apples and pears.

8 Polyethylene liners will extend storage life 1 - 2 weeks.

9 Sweet cherries packed in sealed polyethylene bag liners can be stored up to 3 weeks.

10 Grapefruit is very susceptible to rind pitting and aging at comparatively low temperatures, especially at 38°F.

11 The storage life shown for lettuce is lengthened substantially when trimmed closely and packaged individually in polyethylene bags and stored at 33°F.

12 Onions keep best at a storage temperature of 32°F. This commodity should not be stored with items such as apples and grapefruit since the apples and grapefruit will acquire an onion taste. Compartments should be kept dark.

13 Exposure to temperatures below 50°F. even for a few weeks causes chilling injury and increased decay. The chilling injury causes the interior of the sweet potato to turn gray, brown, or nearly black, depending on how low the temperature is and the length of exposure.

14 Mature green tomatoes should never be stored at low temperature (chill box), where they will fail to ripen, become injured and develop extensive decay. When mature green and/or pink tomatoes are received, they should be stored at 57° to 59°F. until ripe, then held at 32°F. for maximum shelf life of 30 to 35 days. Since individual tomatoes in any given lot will not ripen evenly, it will be necessary to selectively remove the individual fruits which are nearing a firm-ripe condition so that they can be stored at 32° to 35°F. for maximum shelf life.

15 Breads and rolls should not be stored at chill temperatures. Temperatures below 75°F. cause these items to stale rapidly. Galley baked bread and rolls that are to be held for longer than 24 hours should be thoroughly cooled, wrapped in plastic bags or aluminum foil, sealed, and stored at freeze temperature 0°F. or below. Commercial breads and rolls (wrapped and sealed) that are to be held for longer than 48 hours should be stored at freeze temperatures 0°F. or below.

SEMIPERISHABLE FOODS

Semiperishable foods are those items that are canned, dried, dehydrated, or otherwise processed to the extent that they may, under normal conditions, be safely stored in nonrefrigerated spaces. Semiperishable food items are often regarded as nonperishable commodities that do not require special care and protection in storage. This idea is incorrect. Although semiperishable food items are not as susceptible to spoilage as perishable food items, spoilage can and will occur if the items are mishandled, improperly stored, or stored for excessive periods of time. Additionally, the duration of storage must be based on the date of pack and not on the date of receipt.

Most semiperishable food items require clean, cool, dry, well-ventilated storage areas. High temperature and high humidity accelerate spoilage by promoting the deterioration of containers and the growth of bacteria in the food product. Freezing is detrimental to the quality of semiperishable products having a high water content, but most items remain edible after having been frozen and then thawed, if promptly consumed. Infestation by rodents and insects can cause damage to items packaged in bags, boxes, and cartons. These items also tend to absorb odors and lose flavor. This is especially true in storage areas lacking adequate ventilation.

Dry products, such as flour, sugar, and dehydrated foods, ordinarily are not injured by freezing. Also, the usefulness and palatability of wet-packed semiperishable items are not adversely affected by freezing, although their physical appearance may suffer as a result of their texture softening. Emulsions such as canned cheese, prepared mustard, and cream soups are destroyed by freezing, although the food element is not spoiled. Sometimes, they may be reconstituted by rapid heating and the controlled addition of moisture.

High storage temperatures encourage the growth of bacteria, mold, insect infestation, and are particularly dangerous when accompanied by high humidity. In addition, natural chemical action is accelerated, causing rancidity in many items. Rancidity is caused when food acids within the cans becoming activated, resulting in can pinholing, blackening of the interior, and hydrogen swellings. High temperature is the chief cause of accelerated spoilage in canned foods and should be controlled whenever possible by providing adequate ventilation.

High humidity is detrimental to stored food items in many respects. It accelerates the growth of bacteria and mold, promotes insect infestation, and causes mustiness in flour, rice, and similar foods. High humidity will also cause caking of products that absorb moisture, such as salt and sugar. Moisture also causes rusting of cans. Unless it actually penetrates the can, thereby causing leakage, rust will not harm the contents or in itself serve as a reason for food item survey.

The safe storage period for dry subsistence varies with the type of product, storage temperatures, humidity control, handling care, protection from weather, and type of packaging and packing. The maximum shelf life of all subsistence items is decreased by extremes in temperature and humidity. Subsistence items which are stored longer than the keeping times shown in the Storage Table 6-3 will be surveyed ONLY if they are found unfit for human consumption. This storage table is provided for guidance in the rotation of semiperishable food items. The keeping times shown are average keeping times for products stored at 70° F. Keeping times will be reduced by approximately 50% if storage temperatures are maintained at 90° F., and will be increased by almost 100% if stored at 40° F.

PREPARED FOOD ITEMS

Commercially-prepared fruit juices should be consumed after opening. Once the can is opened, the acid of the juice may leach the zinc and other coatings from the can and cause metal poisoning. If you must store juices from one meal to another, you should pour them into suitable plastic or other noncorrosive containers.

Most commercially-prepared salad dressings must be refrigerated after they have been opened. The manufacturer usually indicates this on the container.

You should only reconstitute enough of a nondairy creaming agent to be utilized at one time. Discard any leftovers; do not keep them.

Ground or chopped foods must be refrigerated prior to being cooked. Once they are cooked, you should discard any leftovers. Do not save them.

Cut, sliced, or diced meats must be placed in shallow containers to a depth of NO MORE THAN three inches. You should cover them with lids, waxed paper, polyethylene film (Saran wrap), or some other appropriate covering. You should then

refrigerate them. Frozen meat must be thawed gradually under refrigeration. Once it has thawed, you should use it as soon as possible.

Food items such as dried eggs and vegetables are as susceptible to spoilage after reconstitution as are the fresh items. Dehydrated foods must be cooked or refrigerated immediately following reconstitution.

Cream puffs, custard-filled pies and cakes, eclairs, and similar products, including those containing synthetic fillings, must be covered, cooled quickly, and refrigerated at 40° F. or below until they are served. You must also ensure that these products remain refrigerated at 40° F. or below even on the serving line. DO NOT STORE leftovers; discard them after each meal.

FOOD DISPLAY AND SERVICE

Potentially hazardous foods must be kept either 40° F. or below or 140° F. or above during display and service. Food displayed on salad bars, steam tables, and other serving lines must also be protected from consumer contamination. For this reason, you must always use counter-protector devices, such as "sneeze guards" and display cases. You should also be sure you provide enough serving utensils to eliminate cross contamination between foods. Between uses, serving utensils must be:

- Stored in food containers with the food to be served, or
- Stored clean and dry, or
- Stored in RUNNING water or in water maintained at 170° F.; NEVER store a serving utensil in a container of water at room temperature.

Ice for consumer use must be dispensed only with scoops, tongs, or other ice dispensing utensils. It may also be dispensed through automatic self-service ice dispensing equipment. Between uses, ice dispensing utensils and ice receptacles must be stored in a way that protects them from contamination. Dispensing utensils MUST NEVER BE STORED in ice making machines.

Sugar, condiments, seasonings, and dressings for self-service use must be provided only in individual packages or from dispensers that protect their contents.

Single-service containers of milk and liquid milk products must be refrigerated at temperatures below 40° F. until served. If these products are dispensed from bulk milk dispensers, the products must be homogenized. The temperature in the dispenser cabinets must be maintained in the range of 38° to 40° F. Whole milk containers are stored in them.

Foods which have already been washed/cooked should be stored so that they are not contaminated by foods not yet washed/cooked.

Packaged food must never be stored in direct contact with water; this includes the water accumulation from undrained ice.

Once served to a consumer, individual portions of food must NOT be served again. Packaged food, other than potentially hazardous food, may be re-served (providing it is still wholesome and is properly stored).

If food must be transported prior to service, all the rules of proper storage must be strictly followed.

Table 6-3. - Approximate Storage Life of Semiperishable Food Items at 70° F.

Product	Months
MEAT, POULTRY, AND FISH	
Bacon, sliced, precooked, cn	30
Beef, corned or beef, chunks, cn	42
Chicken, boned or turkey, boned, cn	36
Clams, minced or crabmeat, cn	18
Ham, boned, w/natural juices or ham, chunks, cn	48
Hamburgers, w/o gravy, cn	42
Hash, corned or roast beef, cn	12
Luncheon meat, cn	36
Meat spread: potted, deviled or liversausage, cn	12
Pork, chops, dehydrated, cn	36
Salmon, cn	30
Sardines, cn	18
Shrimp: cn	18
dehydrated, cn	36
Tuna: in oil, cn	30
in water, cn	24
DAIRY FOODS AND EGGS	
Cheese, cottage, dehydrated, cn	12
grated, Parmesan, Parmesan and romano, co	6
processed, American, dehydrated, cn	15
spread: American and pimiento, jr	6
American and Monterey, jr	6-9
Egg mix, dehydrated, cn	36
Ice cream mix, dehydrated, vanilla, cn	15
Ice milk-milk shake mix, chocolate or vanilla, cn	12
Malted Milk, unflavored, cn	24
Milk, nonfat, dry, instant, conventional (style A or C), cn or dr	24
Sour cream sauce mix	12
FRUITS AND VEGETABLES	
Fruits:	
apples, sliced; applesauce; peaches, halves, quarters, or slices, cn	36
cherries, dk sweet, pitted; cranberry sauce, jellied or whole, figs, kadota, cn	24
apricots; fruit cocktail; pineapple, chunks, tidbits, crushed, or slices, cn	33
blackberries, cn	22
blueberries; cherries, red tart; crabapple, spiced, cn	18
cherries, maraschino, jr	18
grapefruit; cherries, lt sweet, unpitted; plums, purple, cn	30
pears, halves or quarters, cn	40
prunes, whole, unpitted, cn	14
Dehydrated:	
apples or applesauce, instant; cherries, red tart, cn	24
Dried:	
apricots, bx	3
currants, pg	12
raisins, cn	18

Product	Months
FRUITS AND VEGETABLES (Cont'd)	
Juices:	
apple; grapefruit; grapefruit, instant; grapefruit and orange; orange; orange, instant; pineapple; cranberry juice cocktail, cn	36
grape; tomato, concentrated, cn	18
tomato, single strength; vegetables; nectar, apricot, cn	24
Vegetables:	
asparagus; beans, green or wax, white in in tomato sauce w/pork; peppers, sweet, red; pimientos, cn	36
beans, kidney, lima, pinto, cn	48
bean sprouts, beets, okra, onions, cn	24
carrots; corn, cream style, whole grain; peas; peas, blackeye; peas, field, cn	42
mushrooms; potatoes, sweet or white; tomatoes, cn	30
pumpkin, cn	27
sauerkraut, cn	18
spinach, cn	33
tomato paste, cn	18
Dehydrated:	
beans, green, cooked, cn	60
cabbage; garlic; onions, chopped; onions, compressed; peas, compressed; peppers, green; spinach, cooked, cn	24
chives, co	12
parsley, cn	9
potato mix, bg	6
cn[2]	12
potatoes, sliced, cn, export	30
bg, domestic	9
instant, cn, domestic	5
export	30
Dried:	
beans, dry, blackeye, kidney, lima, pinto, white, bx, or co[1]	12
peas, dry, bx, or co[1]	12
BAKERY AND CEREAL PRODUCTS	
Barley, pearl, bx	24
Bakery mixes:	
Biscuit; bread and roll; bread, white; cake, devil's food, gingerbread, white, or yellow; cookies, oatmeal; cornbread; doughnut; pancake, regular; sweet dough, cn	36
cake: angel food, banana, cheese, devil's food, pound, spice, white or yellow; pancake, butter, or buckwheat, pg	6
doughnut mix, or sweet dough mix, bg	6-9
Bread crumbs, breading, pg	4
Cereals:	
dry, sugarcoated, uncoated, granules, assorted varieties, bx or ind. bowl	12
farina, bx	9
rolled oats, instant, QC, bx or cn	12

125

Table 6-3. - Approximate Storage Life of Semiperishable Food Items at 70° F. (Continued).

Product	Months
BAKERY AND CEREAL PRODUCTS (Cont'd)	
Cookies, filled or unfilled, assorted varieties	4
Corn flake crumbs	12
meal, pg	12
Cracker crumbs, 50 lb, bg	6
Crackers, cheese or onion flavored, oyster, rye, salad, sesame, soda or wheat, bacon, lb or bx	4
Cup, ice cream, sugar or wafer	18
Flour, rye, bg[3]	12
wheat, bread, cake, or pastry, bg[4]	12
wheat, bread, cn[4]	18
Fry mix, breading or batter	12
Hominy, grits, co	12
whole, cn	36
Noodles, chow mein, cn	12
egg, bow-shape or straight[5]	24
Pasta: lasagna, noodles; macaroni, elbow form; rigatoni, shell or twist; spaghetti; vermicelli[5]	36
Pie crust mix	6
shell, graham	4
Rice, parboiled, bg or co[5]	12
Starch, corn, bx[5]	36
pregelatinized, cn[5]	Indef
Taco shells, corn, co	2
Tapioca, bx	48
Tortillas, corn, cn	24
Wheat base, bg[5]	36
SUGAR, CONFECTIONERY, AND NUTS	
Almond paste	9
Candy: bridge mix, bx	12
bridge mix, cn	39
caramel, bx	9
hard, cn	24
starch jelly, bx	12
starch jelly, cn	48
Chewing gum, pg	4
Chocolate, cooking, semisweet, chips, pg[7]	18
Chocolate: cooking, unsweetened, ck[7]	24
syrup, cn	24
Coconut: prepared, sweetened, co, domestic	6
prepared, sweetened, cn	18
prepared, unsweetened, bg	6
Fruit, candied: cherry, mixed; pineapple, green or natural, jr or lb	6
Honey, extracted, jr	24
Icing mix, chocolate or vanilla, cn	24
Marshmallows, co	2
Molasses, cn	18
Nuts: cashew	12
mixed, shelled, peanuts, pecans or walnuts	24
mixed, unshelled	6
Syrup, blended, corn or imitation maple, cn	24
Sugar: brown, bg or bx[6]	18
refined, granulated, bg, cn or pg[6]	Indef
refined, powdered, confectioner's, bg, bx or poly bg[6]	18

Product	Months
JAMS, JELLIES, AND PRESERVES	
Apple Butter, cn or jr	18
Jams: cherry, peach, pineapple, strawberry, cn or jr	18
Jelly: apple, blackberry, grape, mint, cn or jr	18
Marmalade, orange, jr	18
Peanut Butter, chunky, smooth, cn or jr	36
SOUPS AND BOUILLONS	
Bouillon, dried, cubes, beef or chicken, jr	24
Clam chowder, New York, concensed, cn[9]	36
Soup, condensed: barley w/beef, bean w/ bacon, beef or chicken, noodle, chicken w/rice, cream of chicken, or mushroom, minestrone, split pea, tomato, vegetable, vegetable w/beef, cn[9]	36
Soup, dehydrated: beef noodle, chicken, chunk chicken, pg	18
chicken w/noodles, tomato-vegetable, cn	24
green pea, onion, vegetable, pg or cn	12
onion, cn	30
Soup, instant: beef or chicken, pg	18
onion, pg	12
Soup, RTS: beef or chicken noodle, chicken w/rice, cream of chicken, mushroom, or tomato, vegetable w/beef, cn	36
Soup and gravy base, beef, chicken or ham, bx, cn, or jar	24
FOOD SPECIALTY PREPARATION	
Beans, refried	24
Chili con carne w/o beans, dehydrated w/beans, cn	36
Corn chips, pg	1/2
Cream substitute, pg	36
Dessert powder, gel, cherry, lemon, lime, orange, raspberry, strawberry, co[5]	12
Dessert powder, pud: butterscotch, chocolate, vanilla, instant, chocolate or vanilla, cn	18
Dessert powder, pud: butterscotch, chocolate, vanilla, pg	12
Gelatin, plain, co	36
Meringue powder, cn	24
Mincemeat, cn	24
Pie filling, apple, blueberry, cherry, peach, cn[8]	12
Popcorn, unpopped, cn	36
Potato chips: pg	1-2
cn	12
sticks: cn	24
Ravioli w/meat sauce, cn	24
Tamales, beef, cn	24
Topping: dessert and bakery, dehydrated, cn	24

Table 6-3. - Approximate Storage Life of Semiperishable Food Items at 70° F. (Continued).

Product	Months
FOOD SPECIALTY PREPARATION (Cont'd)	
Topping (Cont'd)	
ice cream, butterscotch, fudge, marshmallow, pineapple, strawberry, cn or walnut, jr	6
FOOD OILS AND FATS	
Salad oil, qt, gl or cn[10]	12
Shortening compound, bakery[11] general purpose, or deep-fry, cn[12]	24
Shortening compound, deep-fry, drum	36
CONDIMENTS AND RELATED PRODUCTS	
Spices: ground or whole, allspice, basil, bay leaves, caraway seed, celery seed, chili powder, cinnamon, cloves, cumin, curry, ginger, mace, marjoram, mustard flour, nutmeg, oregano, paprika, pepper black, cayenne, red, crushed, white, poppy seed, poultry seasoning, rosemary, savory, sesame seed, tarragon, thyme, cn, co or pg[13]	18
Spices: celery, garlic or onion, salt, co	36
Antioxident compound	36
Baking powder, cn	12
soda, bx	Indef
Catsup: tomato, bt	24
tomato, cn	18
Chili sauce, bt	24
Chutney sauce, jr	12
Cream of tartar, co	Indef
Dressings: salad, bleu cheese, French, oil and vinegar, cole slaw, green goddess, Italian, Thousand Island, bt or jr[16]	5
Dressing Mix: salad, bleu cheese, French, Thousand Island, Italian, pg	12
Emulsifier, bread and roll	12
Extract, peppermint, bt	18
Flavoring, imit., or natural, almond, banana, black walnut, brandy, lemon, orange, pineapple, rum, wild cherry, bt	18
Flavoring, imit., maple, smoke, vanilla, bt	Indef
Flavoring, rye	6
Food coloring, liquid, assortment, caramel, egg shade, red, bt	Indef
Food coloring, paste, black, blue, egg shade, green, red, jr	24
Horseradish, dehydrated, bt	24
Hot sauce, bt	24
Inhibitor, mold and rope[5]	9
CONDIMENTS AND RELATED PRODUCTS (Cont'd)	
Monosodium glutamate, co	Indef
Mustard, prepared, cn or jr	18
Olives, green, jr	18
Olives, ripe, sliced, whole pitted or unpitted, cn	24
Peppers, pickled, cherry, jr	18
Peppers, pickled, jalapeno, cn	15
Pickles: cuc, dill, slices, whole, Kosher style, jr	24
cuc, dill, whole cured, cn	12
cuc, sweet, sliced or whole, jr	24
cuc, sweet, whole, cn	12
mixed, sweet, cn	12
mixed, sweet, jr	24
Relish: pickle, sweet, cn	12
pickle, sweet, jr	24
Salad dressing, cn or jr[12]	5
Salt, table, bg or pg[14]	Indef
Sauce for meat, bt	24
Sauce mixes	12
Soy sauce, bt	24
Vinegar, cider or wine, bt	30
Vinegar, dry, synthetic, pg	12
Worcestershire sauce, bt	24
Yeast food, bg	24
COFFEE, TEA, AND COCOA	
Cocoa, natural, cn	24
Coffee: instant, freeze-dried, pg	18
roasted, and ground, cn	12
roasted, and ground, bg	2
Tea: black, loose, or bags, bx or cn	18
instant, instant lemon flavor w/sugar, bx or jr	18
BEVERAGES, NONALCOHOLIC	
Beverage base: powdered, unsweet, cherry, grape, lemon-lime, orange[5] gl yld pg	24
carb: cherry, lemon-lime, orange, root beer, gl	8
carb: cola, gingerale, grape, pepper, strawberry, gl	6
noncarb: fruit punch, grape, lemon, orange	8
imit: powdered, assorted, grape, lemon, lemon-lime, orange, pg	24
Cocoa beverage, powder, pg	24
Water drinking, cn	Indef
COMPOSITE FOOD PACKAGES	
Meal, combat, individual	36

1 High temperatures harden, high humidity causes molding.

2 Absolute storage life not yet established. One year at 70°F. is a conservative estimate.

3 Rye flour loses its delicate flavor 2 months at 40°F., and one week at 90°F. After this time, further flavor change is very slow.

4 Flour should be stored under cool, dry conditions. The best storage conditions are at 52°F. through 55°F. and 50% through 65% relative humidity.

5 Highly susceptible to damage by moisture.

6 Keeping time is based on relative humidity not more than 60%. For storage longer than one month, sugar should be covered with tarpaulins and not stored on damp or concrete floors or near cold walls.

Table 6-3. - Approximate Storage Life of Semiperishable Food Items at 70° F. (Continued).

7 Do not store near other material capable of imparting odor to chocolate.
8 Freezing alters appearance of starch thickening. Baking restores desirable appearance.
9 Cream-style soups break down on freezing, but are not spoiled.
10 When held below 32°F., may show solid material which will disappear on warming.
11 Separates at high temperatures or after freezing.
12 If held above 90°F., changes may occur in texture unfavorable to normal creaming properties.
13 Above 100°F. there is complete loss of flavor in less than 6 months. Whole spices keep longer than ground spices.
14 Humidity above 80% will cause caking. Caked salt is usable.
15 If stored at 140°F., shelf life is 1 (one) month.
16 Salad dressings packaged in large size (gallon) containers deteriorate faster than those packaged in smaller containers.

SELF-QUIZ #6

1. State three conditions which should be avoided in dry storage areas.

   A. _____
   B. _____
   C. _____

2. Why is smoking prohibited in storage areas? _____

3. What are the three primary climatic conditions to be considered in storage?

   A. _____
   B. _____
   C. _____

4. What is the purpose for rotating stock? _____

5. What may happen if you store butter and onions together? _____

6. What happens when fruits and vegetables are stored in tightly closed compartments at 40° F. or higher? _____

7. If frozen perishables are received at temperatures slightly more than the storage area, what should you do with the packages? _____

8. For what purpose do you use storage life tables? _____

9. What is a semiperishable food? _____

10. Why should commercially-prepared fruit juices NOT be left in the cans after opening them? _____

11. At what temperature must bulk milk dispensers be maintained? _____

ANSWERS TO SELF-QUIZ #6

1. Select three of the following conditions which should be avoided in dry storage areas:

   A. Unnecessary traffic
   B. Nearby asphalt, fuel, creosote, paint, or lubricating oils
   C. Smoking
   D. Exposed heated pipes (Page 6-3)

2. Smoking is prohibited in storage areas because *it poses a fire hazard and some foods absorb the odors of smoke.* (Page 6-3)

3. The three primary climatic conditions to be considered in storage are:

   A. Temperature
   B. Air circulation (ventilation)
   C. Humidity (Page 6-3)

4. The purpose for rotating stock is to *ensure using the oldest or that which is most subject to deterioration first.* (Page 6-3)

5. If you store butter and onions together, *the butter may absorb the taste of the onions.* (Page 6-3)

6. If fruits and vegetables are stored in tightly closed compartments at 40° F. or higher, *carbon dioxide which is given off can reach unacceptably high levels.* (Page 6-3)

7. If frozen perishables are received at temperatures slightly more than the storage area, you should *scatter the packages loosely around the area and leave them until everything is adequately cool.* (Page 6-4)

8. Storage life tables are used *to ascertain the correct keeping times and temperatures for foods. Some of these tables also contain the freezing points of some foods.* (Page 6-4)

9. A semiperishable food *is canned, dehydrated, or otherwise processed to the extent that it may be safely stored in nonrefrigerated spaces.* (Page 6-9)

10. Commercially-prepared fruit juices should NOT be left in the cans after they are opened because *acid from the juice may leach the zinc and other coatings from the can and cause metal poisoning.* (Page 6-9)

11. Bulk milk dispensers must be maintained at *38° to 40° F.* (Page 6-10)

READING ASSIGNMENT #7

Pages 7-3 through 7-5

"Supervision - Work Assignments"

OBJECTIVES

After completing this assignment, you should be able to:

1. Cite the five basic steps for matching an individual to a job and obtaining satisfactory results.
2. Cite five factors to consider when you assign your personnel to specific jobs.
3. Explain how experienced personnel can be utilized to augment the performance of less experienced personnel.
4. Explain how a supervisor can utilize job rotation.
5. Explain why you should post work schedules.
6. Describe "on the job" training (OJT).
7. Name the two primary requisites for effective OJT.
8. Explain a supervisor's role in "guiding" personnel on new jobs.
9. Explain why inspection is a necessary aspect of supervision.
10. Explain how the evaluation process is utilized by a supervisor.
11. Explain a supervisor's responsibility to a new striker.

SUPERVISION - WORK ASSIGNMENTS

INTRODUCTION

As you advance to Subsistence Specialist Second Class your responsibilities increase. Your responsibility in such tasks as food preparation and food service now includes not only the work you perform but also that performed by the personnel you supervise. If these people do not perform their jobs well, it reflects on your ability as a supervisor. You, therefore, should develop your ability as a supervisor, noting your weak points and making a conscientious effort to improve them. The following discussion outlines points that should be considered when you are supervising a job.

The steps for supervising almost any job are the same -- whether it is operating galley equipment, planning menus, caring for provisions, cooking, baking, cleaning, or setting tables. You must first have a clear understanding of the jobs that you are responsible for supervising. Then you must make the best use of the personnel whom you supervise. The process of matching the individual to the job and obtaining satisfactory results normally consists of five steps: (1) assigning, (2) training, (3) guiding, (4) inspecting, and (5) evaluating. What you should do and what you should look for in each of these steps is discussed in the paragraphs that follow.

ASSIGNING

Several factors should be considered when you assign jobs to personnel under your supervision:

- Number of personnel available
- Time required for the job
- Time available
- Type of job
- Knowledge of the personnel
- Experience of the personnel

The first three factors - personnel available, time required, and time available - must be used in determining how many people to assign to a job or how many jobs to assign to each individual. The type of job is also an important factor in planning work schedules. Routine jobs, such as cooking, daily or weekly cleaning, wardroom service, or assisting in the pantry or galley, are assigned on a more or less permanent basis and are worked into a daily schedule.

You must also consider the ability and experience of the personnel to be assigned and the amount of time you have for supervising the job. One experienced person may be able to do a particular job without supervision; whereas, the same job could require two less experienced people with supervision. This is not to say that personnel should be assigned only to jobs which they are able to perform well on their own; this would prevent them from increasing their abilities. There is a better alternative. A less experienced person can be teamed with a person of greater experience. Thus, the experienced one is able to develop the ability to train others; the less experienced one learns a new job, and it has not been necessary for you to devote all of your time to supervising one job.

Each person should be familiar with all the jobs assigned to the division; job rotation is an excellent way to achieve this goal. As a person becomes proficient in one job, training should begin on a new job. When the majority of your personnel are experienced in all areas of their rate, it is then easy for you to make reassignments to cover for those on leave or those being transferred. It also makes emergency situations easier to deal with. Job rotation also provides a more equitable distribution of work, particularly when some jobs are less desirable than others.

Work schedules should be posted so that everyone can easily refer to them. Each person can then check the assignment and know exactly what jobs have been assigned to each one.

TRAINING

Some training is required when a person is assigned to a job for the first time. This might be just pointing out where the cleaning gear is kept when a person is given a new cleaning station, or it might be the considerable training required when a person is first assigned to assist in the galley.

For the most part, this training will be "on the job," and it requires that you know your personnel and the scope of their abilities and experience. Then you will not waste time explaining a job that they already know how to do, nor will you expect results

from those people who have little or no knowledge of a job.

Upon assignment to a new job, each person should be given specific instructions as to the performance of the job. The "WHY" should also be included. Knowing the reasons for doing a job a certain way gives the person more incentive for doing it correctly. Personnel are less likely to be careless when they know that such carelessness may lead to injury, illness, or damage to equipment.

In the case of rush jobs, such as the final preparation for serving when the captain is expecting guests, it may be necessary for you to add the final touches yourself. But don't do the job yourself simply because it is easier than training one of your people to do it. Once the person has mastered the skill, the time you have spent in training will pay off many times.

GUIDING

When a person is learning a new job, the time to catch and correct mistakes is when they are first made - not after the habit of making the mistake has been formed.

This makes it necessary for you to observe the person to be sure that the instructions are understood. Mistakes can result from someone doing exactly what he thought you said; and that could be completely the reverse of what you intended to say.

Getting each person off to a good start will increase the person's confidence in himself and in you. As a result, it will make it easier for the person to accept instructions in the future, and it will make learning the next job easier.

The way you observe also makes a difference. The person should not feel that you are just waiting for him to make a mistake so that you can "lay into him." In fact, this type of supervision makes many experienced people nervous, and their performance may not be as good as it could be. It is possible to see that everything is being done correctly without appearing to be watching every move.

It's important that personnel know how well they are doing on a new job - don't keep them guessing. Tell them when their work is satisfactory or better than satisfactory, and it is quite proper to make these comments in the presence of their co-workers. If you must correct or criticize someone, however, it should be done in private. All criticism should be for the purpose of correcting and improving performance, not for the purpose of embarrassing the person.

INSPECTING

When as SS reports that a job has been completed, you should inspect it to see that it is up to the standard in every way. This applies not only to someone learning a new job, but also to someone who is experienced. When the people that you supervise know that you consider a job important enough to inspect, they will probably consider it important enough to do it right. If the job is unsatisfactory, tell them exactly what they did wrong, and allow them to correct the mistakes. Thus, they learn from experience, and they will be less likely to make the same mistake again.

EVALUATING

Reviewing each SS's progress is a necessary part of good management. It goes beyond training, guiding, and inspecting on a particular job, because it takes into account the overall performance of each person. It can be used to good advantage after an SS has worked for some time at a new job. It enables the SS to clear up any understanding or questions regarding the job, and it provides you an opportunity to criticize the work constructively. A review of overall performance is helpful when you are making future assignments. By reviewing a person's previous accomplishments, assignments can be made which will give the person experience in a new area, increase the person's experience in a weak area, or permit the person to work in a preferred area.

Also, a review of total performance provides a better basis for evaluation than one based on only one job; FEW PEOPLE HAVE EQUAL ABILITY IN ALL AREAS.

STRIKERS

As a supervisor, your training responsibilities also extend to new SS strikers. It is extremely important that the stage be properly set for them.

Remember that the young striker is really no different than you were when you reported to your first duty station. That striker needs attention and guidance just as you did when you first reported

aboard. Back then someone else was the "leader;" now it's your turn. You are the one making the impression.

Take a look at how the new SS is treated. Think about some of the things that happen during the first two or three days aboard your unit.

- Are you aware of who is due to report in?
- Do you know approximately when they are due in?

OR –

Do new individuals reporting aboard catch you off guard?

- Do you know where your people are berthed?

OR –

Does "someone else" take care of that?

- Do you have a scheduled program of indoctrination within your area?

OR –

Does it just "take care of itself?"

- Do you assign one of your best people to show the newcomer around?

OR –

Do you give the newcomer to one of the "non-producers" because you can't spare your best workers?

- Do you make it a point to spend an honest 15 minutes with the newcomer to find out his capabilities and desires?

OR –

Are you "too busy"?

- Does someone from your division take the newcomer around for introductions and an orientation tour?

OR –

Is the striker handed a map and pushed on the way?

Remember – the first impression is a lasting one. Your attention to this new individual during the first week aboard will more than repay itself. You should end up with a confident, secure individual who knows that you really are concerned. He should know that he is important and not considered "just another body."

You do not have to go into some complex, rigid, detailed procedure to indoctrinate your new people; simply consider what you would appreciate from your new supervisors if you were reporting aboard for the first time.

Today's strikers are tomorrow's replacement for YOU! TREAT THEM WELL.

SELF-QUIZ #7

1. The process of matching the individual to the job and obtaining satisfactory results normally consists of the following five steps:

   A. _____
   B. _____
   C. _____
   D. _____
   E. _____

2. What factors should be considered when assigning personnel to jobs under your supervision?

   A. _____
   B. _____
   C. _____

3. If you are galley supervisor and have two jobs to be performed with two experienced and two inexperienced persons available for assignment, how should these people be assigned to best use their time and abilities? (Select one correct response.)

   A. Assign both jobs to the experienced persons so you can conduct a training session for the inexperienced people.
   B. Assign one job to the experienced people so you can constantly supervise the inexperienced people on the other job.
   C. Assign one experienced and one inexperienced person to each job and observe the progress of the inexperienced ones.
   D. Assign both experienced people to one job and perform the second job yourself while the inexperienced people observe you.

4. Explain why a good supervisor rotates his personnel from job to job? _____
   _____

5. The amount of training needed by a person who is assigned to a new job is largely determined by _____

6. When assigning a new job to a person, what should you do? _____

7. When a person is learning a new job, the time to catch and correct mistakes is _____

8. When a new person "gets off to a good start," which of the following would probably result? (Select one correct response.)

   A. Many unnecessary mistakes would be avoided.
   B. The new person would have increased confidence in himself.
   C. The new person would be able to learn the next job more quickly and easily.
   D. All of the above.

9. When a person is making good progress in his new job, what should you as a supervisor do for reinforcement? _____

10. When a person's performance is poor, how and for what purpose should criticism take place? _____
    _____

135

SELF-QUIZ #7 ***(Continued)***

11. When a person reports that a job is completed, what should you as a supervisor do? _____
12. When you are reviewing the work of your personnel, you should always try to _____
13. How should you as a supervisor handle new SS strikers? _____

ANSWERS TO SELF-QUIZ #7

1. The process of matching the individual to the job and obtaining satisfactory results normally consists of the following five steps:

   A. Assigning
   B. Training
   C. Guiding
   D. Inspecting
   E. Evaluating

   (Page 7-3)

2. The factors which should be considered when assigning personnel to jobs under your supervision are: (Select three of the following)

   A. Number of personnel available
   B. Time required for the job
   C. Time available
   D. Type of job
   E. Knowledge of the personnel
   F. Experience of the personnel

   (Page 7-3)

3. If you are galley supervisor and have two jobs to be performed with two experienced and two inexperienced persons available for assignment, in order to best use their time and abilities, ***you should assign one experienced and one inexperienced person to each job and observe the progress of the inexperienced ones.*** (Page 7-3)

4. A good supervisor should rotate his personnel from job to job because ***each person should be familiar with all the jobs assigned to the division, and job rotation is an excellent way to achieve this goal.*** (Page 7-3)

5. The amount of training needed by a person who is assigned to a new job is largely determined by ***the abilities and experience of the person being assigned the job.*** (Page 7-3)

6. When assigning a new job to a person, ***you should give specific instructions on how to perform the job and explain what your expectations are.*** (Page 7-4)

7. When a person is learning a new job, the time to catch and correct mistakes is ***when they are first made.*** (Page 7-4)

8. If a person is "off to the right start," ***he probably has avoided making unnecessary mistakes, he is becoming more confident in himself, and he learns each new job very quickly and easily.*** This is all directly due to the fact that he has been methodically and accurately trained each step of the way. (Page 7-4)

9. When a person is making good progress in his new job, you as a supervisor should ***constantly tell him that his progress is good.*** (Page 7-4)

10. When a person's performance is poor, ***your criticism should be done in private. It should be done for the purpose of correcting and improving performance.*** (Page 7-4)

11. When a person reports to you that a job is completed, you should ***first inspect the job.*** You should do this whether your worker is experienced or inexperienced. (Page 7-4)

ANSWERS TO SELF-QUIZ #7 *(Continued)*

12. When you are reviewing the work of your personnel, you should ***always try to evaluate each member on the basis of many performances.*** (Page 7-4)

13. New SS strikers should be handled ***as you would want to be handled.*** (Page 7-4)

READING ASSIGNMENT #3

Pages 8-3 through 8-10

"Supervision - Galley Watch"

OBJECTIVES

After completing this assignment, you should be able to:

1. Cite the three major areas of consideration for a galley watch captain.
2. Explain why the use of proper serving utensils in the galley is important.
3. Describe the serving line areas which should be carefully checked by the galley watch captain.
4. Define "merchandising."
5. Describe a galley watch captain's responsibilities for ensuring proper food presentation.
6. Define "garnish."
7. Cite four rules for garnishing.
8. Explain the importance of "timing" in food service.
9. Describe a watch captain's role in ensuring proper sanitation, appearance, and action of other galley personnel.
10. Cite 15 "galley hints" as listed in this reading assignment.

SUPERVISION - GALLEY WATCH

INTRODUCTION

As an SS supervisor, you may be required to stand independent galley watch or to be responsible for another individual who is standing that watch. As such, you MUST have a thorough understanding of the entire galley operation. You must be well schooled in all aspects of food preparation/food presentation. If you are not, your credibility will very quickly drop with those who work for you. You were provided with many of the basic food preparation/food presentation techniques in your SS3 course and in the first assignments of this text. You should review all of the material to refresh your memory.

In this reading assignment, we shall cover some of the areas a watch captain should note.

FOOD PRESENTATION

Though good food service actually begins in the galley with the preparation of food, proper presentation is equally important. Areas of concern are:

- EQUIPMENT
- SERVING AREAS
- SERVING TECHNIQUES

EQUIPMENT

Always check to ensure that the proper utensils and containers are being used. Use of the proper equipment simplifies food service and controls waste. Also, use of the proper serving utensil aids in portion control, thus eliminating waste. The following equipment is recommended:

Shallow Insert -

Serve foods such as creamed potatoes, broccoli, cauliflower, breaded foods, meat in spaghetti sauce, and other foods which are in a sauce or gravy from shallow insert pans. NOTE: If fried items, particularly items like fried egg plant, are served from these pans, do NOT stack them. Foods at the bottom of the stack will become soggy.

Standard-Sized Insert -

Foods which have a longer "keeping" time without drying out should be served in these pans. Items such as fried chicken, baked potatoes, and macaroni au gratin are good foods to serve from these.

Ice Cream Scoop -

If portions are hard to control, use of an ice cream scoop is recommended. Foods served in this manner include mashed potatoes, rice, bread dressing, and baked beans.

Food Turner -

This utensil is good for lifting such foods as steak, scrambled eggs, or grilled tomatoes.

Basting Spoon (Shallow Spoon) -

Use this type utensil for dipping sauce or gravy from a shallow pan.

Ladle -

Use this utensil for dipping sauce or gravy from a deep insert.

Perforated Spoon -

Serve foods such as peas and boiled cabbage with a perforated spoon so that the liquids can drain back into the serving pan.

Tongs -

Use tongs for fried chicken, asparagus, broccoli, corn on the cob, and other similar foods.

Pie Server -

Use this for serving both pies and cakes.

Knife -

Use a sharp, straight-edged, thin-bladed slicing knife for cutting cakes. You should dip this in warm water before slicing a cake so frosting and cake crumbs will not adhere to the slicing surface. A sharp paring knife is used for cutting pies.

For salads the following equipment is recommended:

Small Ladle -

Use this for thin salad dressing.

Dessert Spoon (Tablespoon) -

Use this type spoon for thickened salad dressings.

Tongs -

Tongs are to be used with carrots, celery, pickles, olives, chef's salad, garden salad, and lettuce.

Perforated Spoon -

Use this type spoon for salads mixed with thin dressing, i.e., cole slaw, fruit salad, and cucumber and onion salad.

Basting Spoon -

Use a basting spoon for compact salad mixtures such as potato salad, ham salad, or fish salad.

Scoop -

Use a scoop for cottage cheese, macaroni salad, and other similar salads.

SERVING AREAS

There are several serving areas with which you as a galley supervisor/watch captain should be concerned. These include:

- SALAD BAR
- REFRIGERATED SALAD-BAR UNIT
- STEAM TABLE
- GRILL
- DESSERT/PASTRY AREA
- BEVERAGE AREA
- MISCELLANEOUS AREAS

Salad Bar

When possible, the menu should include a salad bar. Salads may be preportioned, displayed in bulk (mix your own), or, if space is severely limited or salad ingredients are scarce, the single salad may be used. All salads should be PROPERLY CHILLED. If a refrigerated unit is not available, all items on the salad bar should be kept on a bed of ice. Salad items wilt rapidly and decrease in quality.

In some dining facilities, relish trays are desirable and add interest and variety to the salad bar. Relish trays, like salads, should be properly chilled. Guidelines for preparing relish trays and salad bars are furnished in the Armed Forces Recipe Service. Examples were also furnished in a previous reading assignment in this text.

Be sure to coordinate salad-bar menus with the salad-bar space that is available. Overcrowding detracts from the food and slows service. Efforts to increase variety should be based on experience (customer preference).

Careful attention should be given to arrangement of the salad items. You do not want people reaching over one container of food to get to another. Line up preportioned salads in neat rows rather than scattering them haphazardly. Also, be sure that lettuce and other ingredients do not hang over the edges of the containers, bowls, or plates.

The single salad (large salad bowl) is used more frequently in small dining facilities where space is limited and only one salad is featured. If the dressing is not served separately, add the selected dressing to the salad just before serving. Add dressing sparingly. Too much dressing will wilt salad greens and cause fruits and vegetables to lose crispness.

Refrigerated Salad-Bar Unit

All CG units do not have access to refrigerated salad-bar units. If not, your people should simply follow the suggestions offered under Salad Bar above. If a refrigerated unit is available, the following foods may be served from it:

(1) Cold salad combination plates
(2) Cold sandwiches
(3) Fresh fruit
(4) Preportioned salads

Steam Table

Be sure steam table temperatures are maintained at 180° to 200° F. This temperature should keep food hot but not cook it. Also, heat lamps may be used to help keep food hot.

Be sure that your personnel who work the steam table do not stir or handle the food unnecessarily. Many prepared food items are fragile, and unnecessary handling can cause them to break up.

Coordinate your serving line with your preparation areas. Vegetables should be cooked in batches, and the serving line should be replenished on an "as needed" basis. Do not, however, allow your line people to mix new batches of food with what is already in a serving pan. If this happens, you never know for sure how long a particular item has been on the line. Since vegetables should not be held for more than 20 to 30 minutes at serving temperatures, this is an important safety procedure.

Ensure that your people follow the correct procedures for serving foods from insert pans. Also, arrangement of hot foods on the serving line should be in the following order: soup, vegetables, potatoes (or substitute), meat, sauce (or gravy).

Grill

Grill areas should be set up initially with all necessary equipment and ingredients.

All short-order-type items, such as griddlecakes, French toast, ham slices, bacon strips, and eggs, should be served from the grill on a "prepared-to-order" basis, when possible. Timing is important! Eggs (to order) can hold up a long line of hungry people if you don't have a well-planned, efficient method for fast grilling.

Dessert/Pastry Area

Most desserts should be preportioned and replenished on the serving line frequently. They should be set in a tempting arrangement with like items together. If a special occasion cake is prepared, the unsliced cake should be placed on the serving line so all people can see it. It should be sliced and preportioned as the people are being served.

Pies and cakes should be cleanly cut. Puddings and other similar desserts should be spooned neatly into bowls or dishes. Highly perishable desserts such as cream puddings and pies, custards, gelatins, cream puffs, and eclairs must be kept chilled; ice cream must be kept frozen; and whipped toppings

When you check the serving arrangement of your personnel, several areas come into play. First of all, you should be concerned with timely preparation. Next, you should be concerned about how the food actually looks on the line (appearance). Last, but not least, you should be concerned about your food service personnel – how they look and how they act.

Timely Preparation

The serving line should not be set up too early. Just enough time should be allowed so that the butter won't melt, the bread won't dry out, and the coffee will be fresh. Do not wait until you are completely out of an item before replenishing it. Give the food preparers time to get the next container of food ready. When about 15 servings are left and there are more than that number of people in line, notify your food preparation personnel so that the

second container will be ready when needed. Replenish by removing the inserts or containers and filing them in the galley rather than by dumping food

edible and should be an integral part of the food so that it will not be left on the plate. All foods, however, do not need to be garnished; many have their

If you are not proud of the appearance of the food on the serving line, chances are it is not good tasting either. When menu items are prepared according to approved recipes, the food not only tastes good but looks good too. Be sure your SS's are following approved recipes.

Foods selected for a menu should be of harmonious colors that present an inviting appearance on the plate. Consideration of color helps to avoid monotony and provides interest. Plan a menu so that foods that are to be displayed together, such as vegetables, salads, or desserts, offer a pleasing color contrast.

Using proper garnishes is another way of improving food appearance. Generally, a garnish should be

Still another way of enchancing food appearance is by using various decorations throughout the food service area; centerpieces on tables add greatly to the appearance. A previous reading assignment in this text amplifies this subject for you.

Food Service Personnel

The people who serve food are responsible for its attractiveness and,even more important, its sanitary condition. Every person assigned to the serving line must BE clean and LOOK clean. For men, this means a fresh shave every day. Hands must be washed many times during the day. Uniforms, hats, and aprons must be clean. It is your job as watch captain to ensure that all your personnel observe the sanitation regulations regarding personal cleanliness.

Food service personnel must also be trained to serve food properly, because serving techniques also

(3) To rid a ham of the rind, slit the rind lengthwise on the underside before placing your meat in the roasting pan. As the ham bakes, the rind will pull away and can be removed easily without lifting the meat.

(4) To prevent bacon from curling, dip the strips in cold water before frying —

or

Bacon will lie flat in the pan if you prick it thoroughly with a fork as it fries.

(5) A quick way to separate slices of frozen bacon is to heat a spatula over the stove burner then

SEAFOOD

(5) To make thick asparagus stalks tender, peel the lower parts up to the tender part with a potato

(4) Baking fish in a bed of chopped onion, celery, and parsley not only makes fish taste better, but also keeps it from sticking to the pan.

(5) Do not over-use tartar and seafood cocktail sauces.

VEGETABLES

(1) Cook vegetables in small batches.

(2) Avoid having hot vegetables "swim" in liquid on the serving line.

(3) Use simmering methods of cooking for frozen greens, onions, and cauliflower. These vegetables DO NOT STEAM COOK WELL.

(4) When preparing onions, hold them under water to keep your eyes from watering.

(5) Use general-purpose flour when preparing sauces and gravies.

SOUP GARNISHES

(1) Instead of serving crackers, garnish with parmesan, lemon-butter, bacon, garlic, or curried croutons.

(2) Sprinkle grated parmesan cheese on top of tomato, asparagus, or celery soup.

(3) Browned franks, cut into 1/16th inch slices, are great in pea and bean soups.

(4) Toast sticks, trimmed from bread and baked into strips, with parmesan cheese, chopped parsley, and thin-sliced lemon enhance a good onion soup.

(5) Toasted almonds go well with cream of celery, cream of mushroom, and corn chowder soups.

(6) Crumble blue cheese into green pea, navy bean, French onion, and vegetable soups.

(7) Mint leaves enrich the flavor of cream of chicken, consomme, gumbo, and tomato-vegetable soups.

(8) Sliced mushrooms go well with beef noodle, French onion, and vegetable soups.

(9) Sliced stuffed olives enhance beef-barley, chicken noodle, and clam chowders.

(10) Slice green onions (scallions) into almost any soups.

(11) Other garnishes, such as grated orange rind, chopped pickle, diced pimento, sour cream, thyme croutons, and watercress will make soups more exciting and hold patrons' interest.

BAKING

(1) Breakfast pastries and dinner rolls should be warmed prior to serving in order to enhance their flavor and freshness.

(2) Leftover bread and bread ends should be saved and refrigerated for use in bread dressings, puddings, and croutons.

(3) To enchance eye appeal of sheet cakes, they should be decorated with icing of a contrasting color. Coconut can be sprinkled over cakes with pleasing results. Maraschino cherries, nuts, chocolate chips, and canned fruit are only a number of imaginative suggestions for garnishing cakes.

(4) Whipped cream, meringue, or other similar toppings applied with decorating tips are good ideas for garnishing pie products.

(5) If frosting becomes too hard or stiff as you are beating it, beat in a little lemon juice.

(6) To make a smooth looking frosting, first frost cake with a thin layer of icing. When this "base" coat sets, apply a second final coat. It goes on easily and looks superb.

(7) To keep fudge frosting soft and workable, keep frosting in a bowl in a pan of hot water; ADD one teaspoon of cornstarch for the smoothest frosting yet.

(8) Fruits and raisins may be rolled in flour before being added to cake batter. They won't be as likely to sink to the bottom of the cake.

(9) If the top of your cake is browning too quickly, place a pan of warm water on the rack ABOVE the cake while it is baking in the oven.

(10) Brush the unbaked bottom crust of your pie with well-beaten egg white before filling. This keeps berries and other fruits from making pie bottoms mushy.

(11) For the highest meringue, the secret is to add a pinch of baking powder to room-temperature egg whites before beating.

EGGS

(1) When peeling eggs, crack shell of boiled egg all over. Insert small wet spoon just between shell membrane and egg, then turn with the egg. Keep spoon wet while you go. You'll get a perfectly peeled egg every time.

(2) For a more tender omelette, add a small amount of water instead of milk or cream.

CHEESE

(1) Cottage cheese will remain fresher longer if stored upside down in your reefer.

(2) Brush a little oil on the grater before you start grating, and cheese will wash off the grater easily.

(3) A dull knife works much better than a sharp one for slicing cheese.

(4) Warm the knife when cutting cheese, and you will find the cheese cuts as easily as butter.

FRUITS

(1) Submerging a lemon in hot water for 15 minutes before squeezing will yield almost twice the amount of juice.

(2) To increase orange juice yield, follow hints for lemons.

(2) If you put oranges in a hot oven before peeling them, no white fibers will be left on them.

In this text, you have been provided with some of the supervisory aspects of dining facility operation. The other component of this course is also an Institute-produced text. It covers supply procedures and paperwork for SS personnel. If you combine the information in these two texts with what you learned in your SS3 course and with your practical experience, you should be able to perform your supervisory/ managerial duties in an effective manner.

SELF-QUIZ #8

1. As a galley watch captain, what are your three major areas of concern?

   A. _____
   B. _____
   C. _____

2. Why should you always use the proper equipment in the galley? _____

3. What type foods should you serve with an ice cream scoop? _____

4. Why should you not stack fried foods such as egg plant? _____

5. Draw a line from the food in Column A to the type serving utensil you should use for each in Column B.

A	B
Cottage cheese	Small ladle
Thin salad dressing	
Asparagus	Perforated spoon
Eggs	
Peas	Ice cream scoop
Fried chicken	
Steak	Food turner
Boiled cabbage	
Rice	Tongs

6. If you do not have a refrigerated salad-bar unit, how should you present salad items on the serving line?
   _____

7. How should vegetables be replenished on the serving line? _____

8. What is "merchandising"? _____

9. As a galley watch captain, with what three aspects of food presentation should you be most concerned?

   A. _____
   B. _____
   C. _____

10. What is a garnish? _____

11. When using garnishes, what four rules must you follow?

    A. _____
    B. _____
    C. _____
    D. _____

12. What part does "timing" play in the food preparation/food service process? _____
    _____

SELF-QUIZ #8 ***(Continued)***

13. List three things a watch captain might check regarding his food service personnel.

    A. _____
    B. _____
    C. _____

14. What can you do to keep link-type sausage from shrinking or breaking? _____

15. To compensate for not having a roasting rack for meats, what cooking procedure can you use? _____

16. What can you do to get rid of the "canned" taste in canned shrimp? _____

17. How can you get rid of cabbage odor as the cabbage cooks? _____

18. What can you do to make cottage cheese remain fresher longer? _____

ANSWERS TO SELF-QUIZ #8

1. As a galley watch captain, your three major areas of concern are the ***equipment, the serving areas, and the serving techniques.*** (Page 8-3)

2. You should always use the proper equipment in the galley ***to simplify food service and control waste.*** (Page 8-3)

3. Foods which you should serve with an ice cream scoop are ***those for which portions are hard to control.*** (Page 8-3)

4. Some fried foods should not be stacked on the serving line because ***they will become soggy.*** (Page 8-3)

5.
Cottage cheese	- Ice cream scoop
Thin salad dressing	- Small ladle
Asparagus	- Tongs
Eggs	- Food turner
Peas	- Perforated spoon
Fried chicken	- Tongs
Steak	- Food turner
Boiled cabbage	- Perforated spoon
Rice	- Ice cream scoop

(Pages 8-3 - 8-4)

6. If you do not have a refrigerated salad-bar unit, you should present the salad items so that the ***containers are kept on a bed of ice.*** (Page 8-4)

7. You should ***cook vegetables in small batches*** and ***replenish the serving line on an "as needed" basis.*** Do not mix new batches with those already on the line. (Page 8-5)

8. "Merchandising" is ***presenting foods on a serving line so that they are attractive and appealing.*** (Page 8-6

9. You need to be concerned with (A) ***timely preparation of food,*** (B) ***food appearance,*** and (C) ***food service personnel.*** (Page 8-5)

10. A garnish is ***any edible decoration used to enhance the appearance of foods.*** (Page 8-6)

11. When using garnishes, you must follow the following rules:

    A. Plan simple garnishes
    B. Vary them
    C. Use harmonizing colors
    D. Use them sparingly

    (Page 8-6)

12. Timing is important in several areas of food preparation/food service. ***Food should be prepared at the appropriate time*** so that it is fresh when served. ***Replenishment of foods on the line should be done at the appropriate times. "To order" foods should be promptly prepared.*** (Page 8-6)

150

ANSWERS TO SELF-QUIZ #8 ***(Continued)***

13. You should list three of the following things a watch captain might check regarding his food service personnel:

    A. Clean hands
    B. Clean clothes
    C. Men clean shaven
    D. Should be courteous
    E. Should be helpful
    F. Should not "goof off" (Pages 8-6 - 8-7)

14. To keep link-type sausage from shrinking or breaking, you can either ***boil them for about eight minutes or roll them lightly in flour*** prior to frying them. (Page 8-7)

15. If you do not have a roasting rack for meats, you can ***make a grid of carrot and celery sticks then place the meat on that grid for cooking.*** (Page 8-7)

16. To get rid of the "canned" taste in canned shrimp, you can soak them in a little sheery and two tablespoons of vinegar for about 15 minutes. (Page 8-8)

17. To get rid of the odor of cabbage as it cooks, you can ***place a small container of vinegar on the range.*** (Page 8-8)

18. To make cottage cheese remain fresher longer, ***you can store it upside down in the reefer.*** (Page 8-9)

156

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